



Columbian
Hargrave
Warren
Brink & Cotton

HEAVY GOODS

CHISELS & PUNCHES

CLAMPS

VICES

p 9 (+ p 11)



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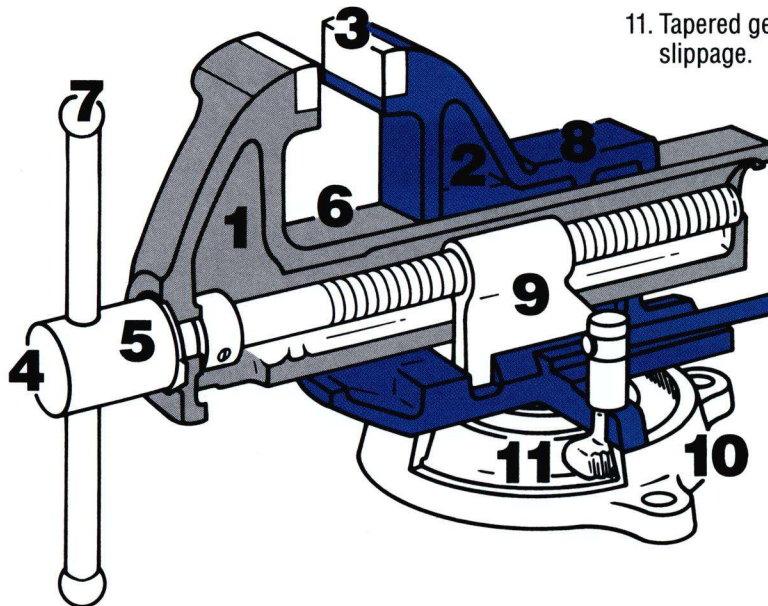
COLUMBIAN® Vises

Columbian® Machinist's Vises, Combination Pipe Vises and Bench Vises are manufactured by The Warren Tool Group. They are the only vises produced in the United States that are covered by an Unconditional Lifetime Guarantee against defects in material or workmanship on the main castings (consisting of the front jaw and back jaw).

The same quality is built into the balance of the Columbian® Vise line. From our sheet metal, workshop, drill press, and angle vises to the exceptional woodworker's vises. You can count on our tradition of U.S. quality, performance and dependability.

All Columbian® vises meet or exceed current Federal Specifications GGG-V-410.

1. Malleable or ductile iron front jaw with heavy internal ribs for added strength. Unconditionally guaranteed against defects in material or workmanship.
2. Malleable or ductile iron back jaw designed for positive alignment with the front jaw. Unconditionally guaranteed against defects in material or workmanship.
3. Removable, hardened steel faces that are easily replaced.
4. Powerful, cold rolled steel screw.
5. Specially designed, alloy thrust washers reduce friction, prevent wear and eliminate end play.
6. Front jaw beam covers and protects screw.
7. Steel handle balls forged from handle stock. Can't come loose.
8. Large ground and polished anvil.
9. Precision-machined nut and back jaw keyway guarantee positive alignment.
10. Malleable or ductile iron base. Swivels full 360°.
11. Tapered gear lock bolt prevents slippage.



**COLUMBIAN®
Machinist's Vises
Are Guaranteed**

Guarantee

Warren Tool Group

10610 Freedom Street • P.O. Box 286 • Garrettsville, Ohio 44231 • (216) 527-5681

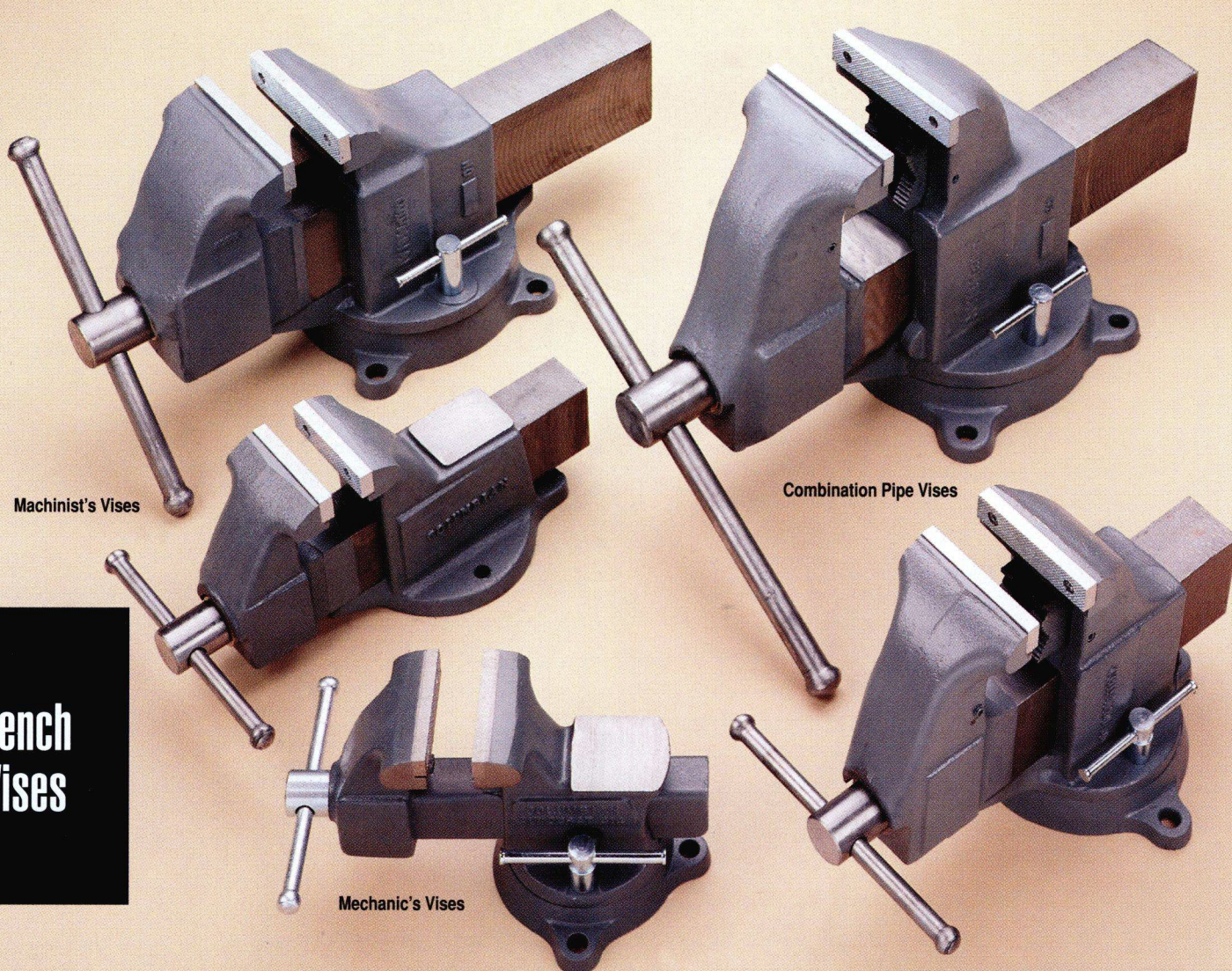
Toll Free: 1-800-543-3224 • Fax No.: 1-800-543-3225 • Canadian Fax: 216-527-5600

All items herein have I.D.A. five digit numbers.

The Warren Tool Group manufacturer's code number is 698580.

The Warren Tool Group UPC prefix code number is 19907.





Machinist's Vises

Combination Pipe Vises

Mechanic's Vises

Bench Vises

Mechanic's Vises

Designed to give years of performance, these vises have strong ductile iron castings that are guaranteed against defects in material or workmanship. Hardened, replaceable tool steel jaw faces are furnished with a deep diamond knurl pattern to insure maximum gripping strength. Permanent tri grip pipe jaws are designed for maximum gripping pressure on pipe/tubing. Swivel base allows for full 360° rotation of vise. Heavy duty channel covers and protects the acme threaded, cold rolled steel screw.

Item No.	Vise No.	Jaw Width	Jaw Opening	Throat Depth	Pipe Capacity	Weight (Lbs.)
11204	414	4"	5"	3-1/2"	1/8"-2"	30
11205	415	5"	6"	3-3/4"	1/8"-2-1/2"	38

Machinist's Vises

America's most popular machinist's vises have strong ductile iron main castings that are guaranteed for life against defects in workmanship or materials. Steel handle balls are forged from handle stock, eliminating sharp edges that may cause injury.

Hardened, replaceable, tool steel jaw faces are furnished with a deep knurled pattern to insure positive gripping. Plain jaw faces are also available on request. All sizes except 6" & 8" have a generous ground/polished anvil. Stationary Base models have a flat base which makes it unnecessary to modify bench top for mounting.

Swivel Base models allow full 360° rotation. Geared bolt and locknut afford positive locking against slippage.

Machinist's Vises			Stationary Base			Swivel Base		
Jaw Width	Jaw Opening	Throat Depth	Item No.	Vise No.	Wt. (Lbs.)	Item No.	Vise No.	Wt. (Lbs.)
3"	4"	3"	10101	503M3	21	10201	603M3	25
3-1/2"	5"	3-1/4"	10102	503-1/2M3	30	10202	603-1/2M3	35
4"	6"	3-5/8"	10103	504M3	38	10203	604M3	46
4-1/2"	7"	4-1/8"	10104	504-1/2M3	49	10204	604-1/2M3	57
5"	8"	4-1/4"	10105	505M3	60	10205	605M3	70
6"	10"	4-3/8"	10106	506M3	92	10206	606M3	107
8"	12"	6"	10108	508M3	160	10208	608M3	184

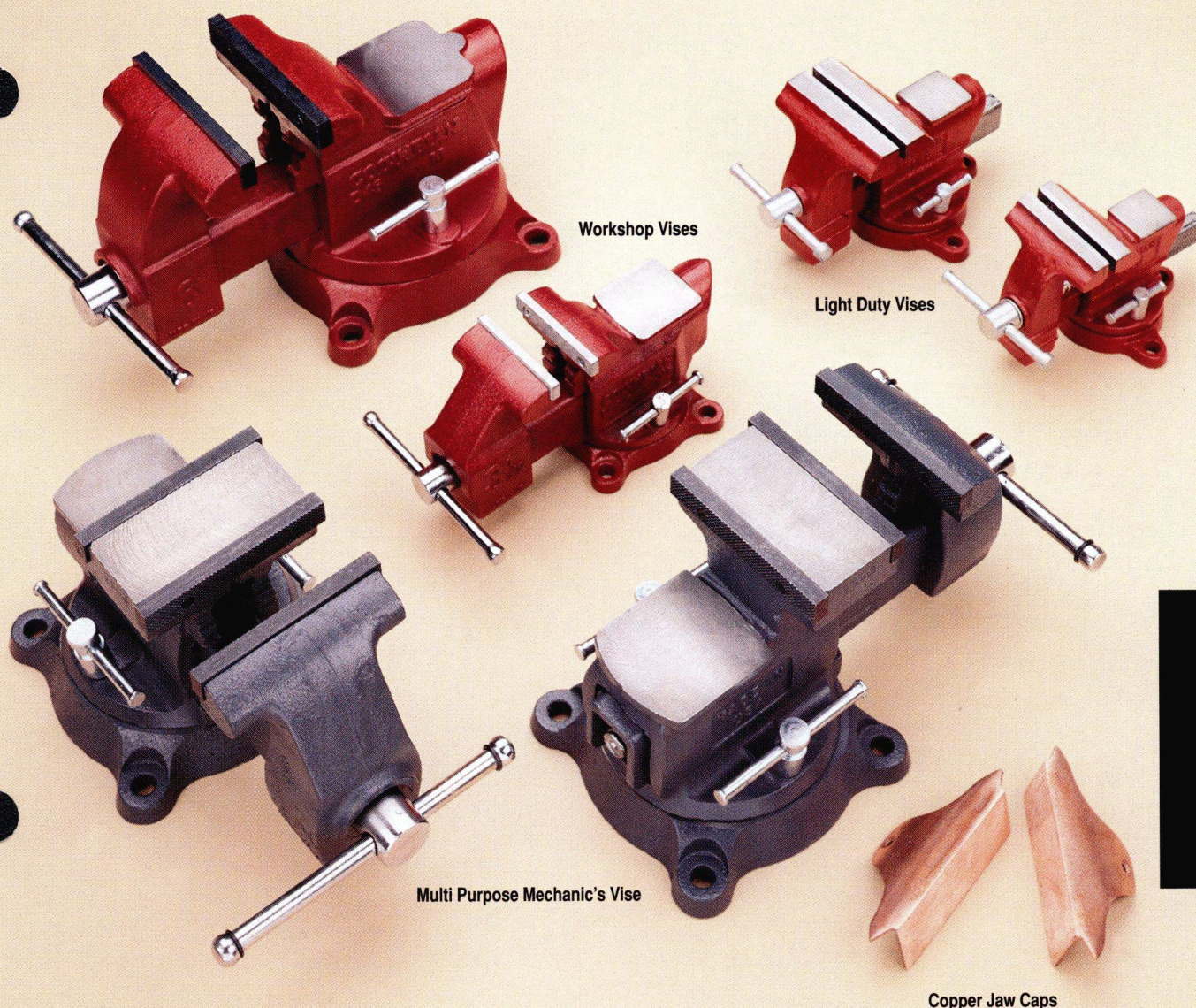
Stationary base conforms to Federal Specification GGG-V-410, Type VI, Class 1.
Swivel base conforms to Federal Specification GGG-V-410, Type VI, Class 2.

Combination Pipe Vises

Strong, ductile iron main castings are guaranteed for life against defects in workmanship and materials. Hardened steel jaw faces are furnished with a deep knurled pattern to insure strength and long life. Pipe jaws are interchangeable and reversible, and designed to hold pipe sizes down to 1/8". These pipe jaws do not protrude beyond the jaw faces, so other work can be held without removing pipe jaws. Swivel base allows full 360° rotation, geared lock bolt insures positive locking against slippage.

Item No.	Vise No.	Jaw Width	Jaw Opening	Throat Depth	Pipe Capacity	Weight (Lbs.)
10403	203-1/2M3	3-1/2"	4"	4"	1/8"-2-1/2"	38
10404	204-1/2M3	4-1/2"	5"	5-3/8"	1/8"-3-1/2"	61
10405	205M3	5-1/2"	6"	6-1/4"	1/8"-4-1/2"	95
10406	206M3	6"	10"	7-1/8"	1/8"-6"	162

Conforms to Federal Specification GGG-V-410, Type VI.



Workshop Vises

Light Duty Vises

Multi Purpose Mechanic's Vise

Copper Jaw Caps

Bench Vises

Workshop Vises

An excellent yet inexpensive utility vise. Newly redesigned body distributes forces more evenly and increases the body strength. Instant-Action® vise design ensures immediate engagement of the jaw due to a new spring loaded handle/screw design. New paint process increases resistance to misuse/harsh environments. Heavy duty jaw beam covers the cold rolled, acme threaded screw. Positive locking swivel base rotates 180°. Permanent pipe jaws and replaceable serrated jaw faces.

Item No.	Vise No.	Jaw Width	Jaw Opening	Throat Depth	Pipe Capacity	Weight (Lbs.)
11103	D43-1/2	3-1/2"	4"	2-5/8"	1/8"-2"	16
11104	D44	4-1/2"	5"	3-7/16"	1/8"-2-1/2"	27
11105	D45	5-1/2"	6"	3-11/16"	1/8"-2-1/2"	38
11106	D46	6"	6"	4-3/16"	3/8"-2-3/4"	60

Multi Purpose Mechanic's Vise

Ideal for a wide range of work. Perfect for the tool room, shop or mechanic's bench. With jaws in normal position you have a vise with 5-1/2" wide jaws, 6" opening. Reversing the jaw gives you a vise with 5-1/2" jaw width and an incredible 9-3/4" jaw opening. Main castings are of the highest grade gray iron available. Replaceable, hardened tool steel jaw faces are furnished with a deep knurled pattern for maximum gripping. Two lockdown bolts are furnished for maximum locking and stability. Swivel base with four mounting lugs allows for 360° swivel. Two working anvil surfaces.

Item No.	Vise No.	Jaw Width	Jaw Opening	Throat Depth	Pipe Capacity	Weight (Lbs.)
14500	4500	5-1/2"	6"	3-3/4"	1/8"-3"	50
	*	5-1/2"	9-3/4"	3-3/4"		

*With 4500 vise jaws in reverse position.

Light Duty Vises

A good quality, price point vise...ideal for the home shop. Main body casting of rugged cast iron with built in pipe jaws, steel jaw faces, polished anvil, plated screw and cross handle. Enamel finish makes this imported vise visually attractive.

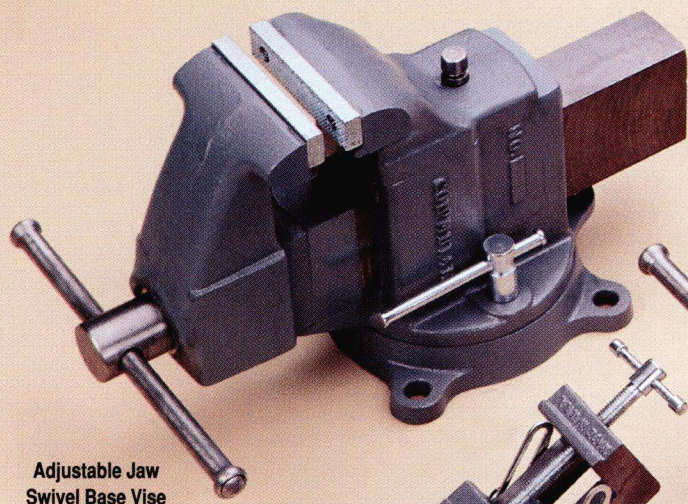
Item No.	Vise No.	Jaw Width	Jaw Opening	Pipe Capacity	Weight (Lbs.)
31035	1035	3-1/2"	4"	1/8" - 1-1/4"	9
31045	1045	4-1/2"	5"	1/8" - 1-1/4"	13-1/2

Copper Jaw Caps

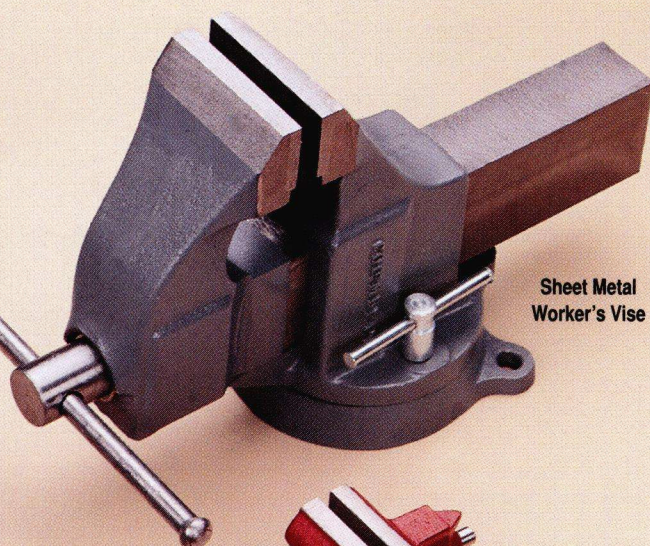
Fit snugly over jaws and cover knurled steel faces to prevent marring of soft materials. Easily installed and removed.

Item No.	Jaw Width	Item No.	Jaw Width
14401	3"	14404	4-1/2"
14402	3-1/2"	14405	5"
14403	4"	14406	6"

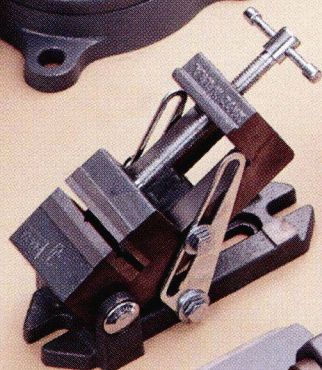
Bench Vises



Adjustable Jaw Swivel Base Vise



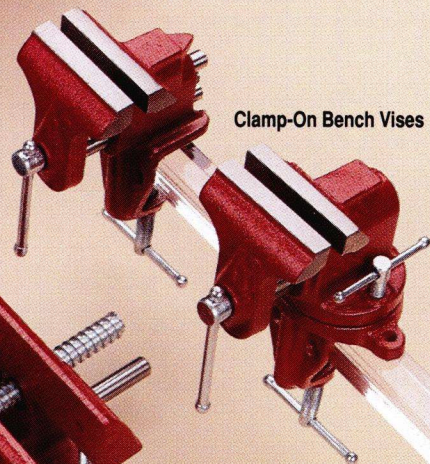
Sheet Metal Worker's Vise



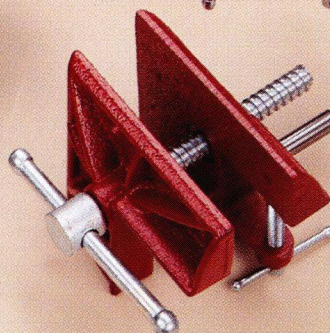
Angle Vise



Drill Press and Milling Machine Vises



Clamp-On Bench Vises



Saw Horse Vise

Adjustable Jaw Swivel Base Vise

Ideal for wide range of work. Indispensable in tool room or shop. With pin in place, swivel back jaw is locked rigidly for use as parallel jaw vise. Removal of pin permits adjustment of back jaw to firmly grip irregular or tapering pieces. Malleable or ductile iron castings. Steel handle balls forged from handle stock. Special alloy thrust washer. Hardened tool steel, replaceable jaw faces.

Item No.	Vise No.	Jaw Width	Jaw Opening	Throat Depth	Weight (Lbs.)
10304	404-1/2M3	4-1/2"	6"	4-1/8"	59

Conforms to Federal Specification GGG-V-410, Type VI, Class 3.

Angle Vise

For drill press, milling machine, grinder and bench work. Makes quick, accurate setups without clamps or wedges. Adjusts to any angle, 0° to 90°. Can be used as an ordinary vise when horizontal. Accurately graduated for all angles. Grooved, steel jaw for holding round or tapered pieces. Steel, adjustable support screws. Overall length is nine inches.

Item No.	Vise No.	Jaw Width	Jaw Depth	Jaw Opening	Screw Dia.	Weight (Lbs.)
10802	225	2-1/2"	1-1/2"	2-1/2"	1/2"	8

Drill Press and Milling Machine Vises

Eliminates need for special and expensive jigs and fixtures. Provides maximum clamping and holding power. Choice of fixed or replaceable jaw faces. Acme threaded, cold rolled steel screw. Swivel crank handle drops out of way. Four key slots provide precision mounting. All parts replaceable and interchangeable.

Item No.	Vise No.	Jaw Width	Jaw Depth	Jaw Opening	Screw Dia.	Weight (Lbs.)
10713*	1513-1/2	3-1/2"	1-7/8"	4-1/2"	3/4"	17-1/2
10715*	1515	5"	2"	6-7/8"	7/8"	29-1/2
10725**	1525	5"	2"	6"	7/8"	32

*Jaw Style is fixed. **Jaw Style is replaceable.

Sheet Metal Worker's Vise

Specially designed for sheet metal work, woodworking and body work. High tapering jaws with extra deep, smooth faces. Malleable or ductile iron castings. Replaceable steel jaw faces.

Item No.	Vise No.	Jaw Width	Jaw Opening	Throat Depth	Weight (Lbs.)
10504	224-1/2M2	4-1/2"	9"	5-7/8"	63

Conforms to Federal Specification GGG-V-410, Type III.

Clamp-On Bench Vises

Nos. 150 and 153

Portable and compact bench vises for light work in the home, garage and shop. Small enough to store in a drawer or tool box, yet durable and strong. Cast iron. Cast in pipe jaws. No. 153 has swivel base. Made in U.S.A.

Item No.	Vise No.	Jaw Width	Jaw Opening	Weight (Lbs.)
33150	150	3"	2-1/2"	4
33153	153	3"	2-1/2"	6

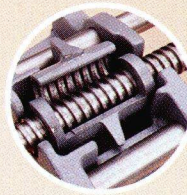
Saw Horse Vise

No. 175

Portable, grey iron woodworking vise holds work horizontally or vertically. Clamps on to any surface up to 2" thick. Cold rolled steel guide bars. Jaws are drilled for attaching wood faces. Plated steel main screw and crosspin handle. Red enamel finish. Made in U.S.A.

Item No.	Vise No.	Jaw Size	Jaw Opening	Weight (Lbs.)
33175	175	5-3/4"	4"	6-1/2

Continuous Screw
Woodworker's Vises
(Rapid Acting)



Woodcraft Vise

Continuous Screw
Woodworker's Vises
(Solid Nut)

"Wide Side" Vise

Woodworker's Vise

Wood- worker's Vises

Woodcraft Vise No. 176

Lightweight woodworking vise designed especially for the home craftsman. High tensile grey iron jaws with cold rolled steel guide bars. Jaws are drilled for attaching wood faces. Zinc plated steel main screw and crosspin handle. Red enamel finish. Made in U.S.A.

Item No.	Vise No.	Jaw Size	Jaw Opening	Weight (Lbs.)
33176	176	6-1/2"	4-1/2"	5

Woodworker's Vise No. 178

Versatile woodworking vise for the home craftsman, woodworking shop and school shop. Features sliding dog in front jaw for use with bench stops. High tensile grey iron jaws with cold rolled steel guide bars. Jaws are drilled for attaching wood faces. Plated steel main screw and crosspin handle. Red enamel finish. Made in U.S.A.

Item No.	Vise No.	Jaw Size	Jaw Opening	Weight (Lbs.)
33178	178	7"	8"	11

Continuous Screw Woodworker's Vises Rapid Acting

For use where changes in jaw openings must be made frequently and fast. Clockwise operation engages Power-Slide™ mechanism with continuous thread screw for unrestricted inward motion and holding power. Counterclockwise operation disengages mechanism for "fast sliding" adjustment of jaw opening. Vises furnished with dog type front jaw for use with bench stops.

Item No.	Vise No.	Jaw Size	Jaw Opening	Weight (Lbs.)
11802	7RD	4" x 7"	9"	28
11812	10RD	4" x 10"	12"	34

Conforms to Federal Specification GGG-V-445, Type 1, Class 2.

"Wide Side" Vise

7" Woodworker's Vise with 2-1/2" clamping area on the left side where it is needed most. Clamping area is 20 percent larger than that of conventional 7" Woodworker's Vise. Dog type front jaw for use with bench stops.

Item No.	Vise No.	Jaw Size	Jaw Opening	Nut Type	Weight (Lbs.)
12102	V7RD	4" x 7"	9"	Rapid Act.	30

Continuous Screw Woodworker's Vises Solid Nut

For general industrial and school woodworking. Heavy steel screw with double lead, fast running thread provides maximum operating speed. Solid nut assures long, repair free life. Vises furnished with dog type front jaw for use with bench stops.

Item No.	Vise No.	Jaw Size	Jaw Opening	Weight (Lbs.)
11902	7CD	4" x 7"	9"	28
11912	10CD	4" x 10"	12"	34

Conforms to Federal Specification GGG-V-445, Type 1, Class 1.

Forged Steel Clamps



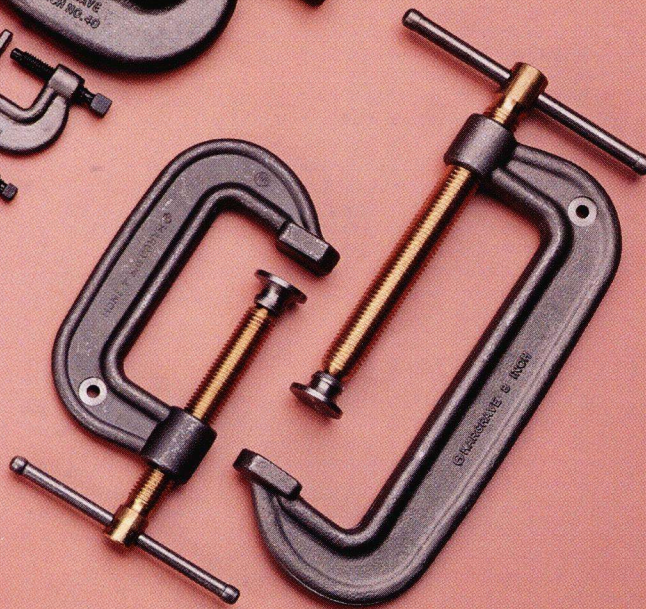
Heavy Service, Forged Steel Clamps



Heavy Service, Forged Steel Superclamp®



Regular Duty, Forged Steel Welder's Clamps



Heavy Duty, Forged Steel Welder's Clamps

Heavy Service, Forged Steel Superclamp® No. 40

Frame is forged, high strength, heat treated steel. Large diameter screws are full length and hardened to prevent bending, protect threads. Clamp strengths exceed test loads shown.

Item No.	Stock No.	Opening Max.	Opening Min.	Depth*	Screw Dia.	Test Load (Lbs.)	Weight (Lbs.)
20201	0	3/4"	0"	3/4"	3/8"	2,800	1/2
20202	1	1-3/16"	0"	1-1/8"	7/16"	5,600	3/4
20203	1-1/2	1-9/16"	0"	1-5/8"	5/8"	8,950	1-1/2
20204	2	2-1/4"	0"	1-7/8"	3/4"	12,500	3-3/4
20205	3	3-1/4"	0"	2-1/2"	7/8"	16,250	6-1/2
20206	4	4-1/2"	0"	2-3/4"	7/8"	20,000	10
20207	5	5-1/2"	0"	3-1/8"	7/8"	23,800	13
20208	6	6-1/2"	0"	3-3/8"	1-1/8"	27,500	17
20209	8	8-1/2"	0"	3-3/4"	1-1/8"	31,250	24
20210	10	10-1/2"	0"	4-1/8"	1-1/8"	35,000	29
20211	12	12-1/2"	0"	4-1/2"	1-1/8"	40,000	40

*Depth is from center of screw to frame.

Conforms to Federal Specification GGG-C-406D, Type 1, Class D, heavy service.

Heavy Service, Forged Steel Clamps No. 100

Recommended for heavy industrial and construction work demanding extra strength. Drop forged from selected steel and accurately heat treated. Steel swivels are securely attached to hardened, square head steel screws.

Item No.	Clamp No.	Opening Max.	Opening Min.	Depth*	Screw Dia.	Test Load (Lbs.)	Weight (Lbs.)
21052	102	2"	0"	1-1/2"	1/2"	7,500	1-1/2
21053	103	3"	0"	2"	5/8"	8,500	3
21054	104	4"	0"	2-3/8"	3/4"	10,000	4-1/2
21056	106	6"	0"	2-1/2"	3/4"	11,250	5-1/2
21058	108	8"	0"	2-5/8"	3/4"	12,500	7-1/4
21060	110	10"	0"	2-3/4"	3/4"	13,750	9-1/4
21062	112	12"	0"	2-7/8"	3/4"	15,000	11-1/2

*Depth is from center of screw to frame.

Conforms to Federal Specification GGG-C-406D, Type 1, Class B, medium service.

Forged Steel Welder's Clamps

Screws are made of special bronze alloy (solid, not plated or coated) that resists spatter. They are large in diameter to prevent bending or breaking. Oscillating (ball and socket) tip is steel—put on to stay. Frames are forged steel, and drilled for ground connections.

Regular Duty, Forged Steel Welder's Clamps No. 41

Item No.	Opening Max.	Opening Min.	Depth*	Screw Dia.	Test Load (Lbs.)	Weight (Lbs.)
20503	4"	0"	2-1/2"	5/8"	3,700	2
20504	6"	0"	3-1/8"	3/4"	4,500	3-1/2

*Depth is from center of screw to frame.

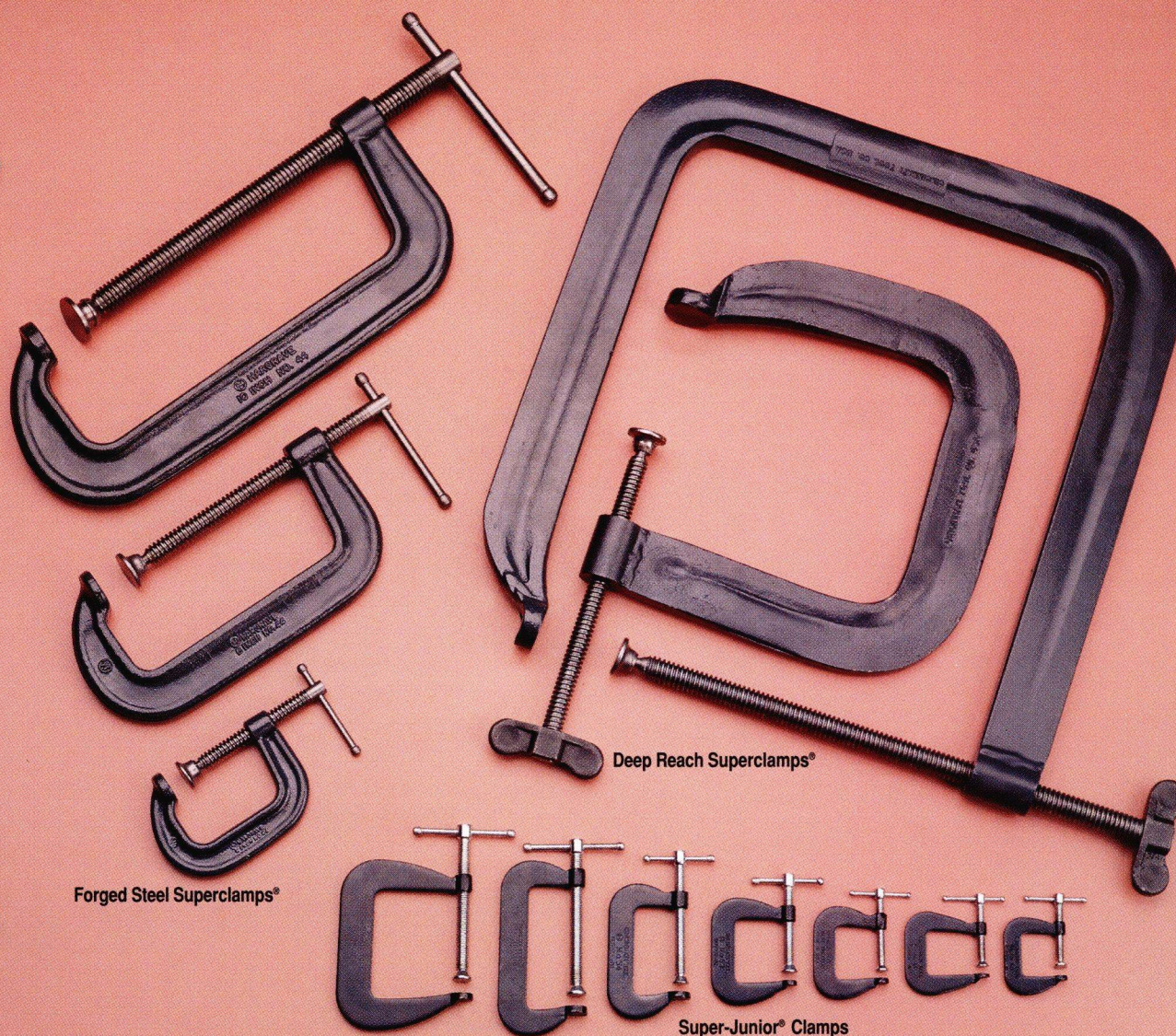
Conforms to Federal Specification GGG-C-406D, Type 1, Class A, light service.

Heavy Duty, Forged Steel Welder's Clamps No. 43

Item No.	Opening Max.	Opening Min.	Depth*	Screw Dia.	Test Load (Lbs.)	Weight (Lbs.)
20601	4"	0"	2-1/2"	7/8"	10,000	4-1/2
20602	6"	0"	2-3/4"	1"	11,250	6
20603	8"	2-3/16"	2-3/4"	1"	12,500	7

*Depth is from center of screw to frame.

Conforms to Federal Specification GGG-C-406D, Type 1, Class B, medium service.



**Forged
Steel
Clamps**

Forged Steel Superclamps®

No. 44

Frame is high strength, heat treated steel. Handle is sliding pin (vise type). Large diameter screws run full length in all sizes and are specially manufactured to prevent bending and damage to threads.

Item No.	Max. Opening	Depth*	Screw Dia.	Test Load (Lbs.)	Weight (Lbs.)
21103	2"	1-3/4"	1/2"	2,700	1
21104	3"	2-1/4"	1/2"	3,000	1-1/2
21105	4"	2-1/2"	5/8"	3,700	2-1/4
21106	6"	3-1/8"	5/8"	4,500	3-1/2
21107	8"	3-3/4"	3/4"	5,200	5-1/2
21108	10"	4"	7/8"	6,000	8
21109	12"	4-1/4"	7/8"	8,000	9-1/2

*Depth is from center of screw to frame.

Conforms to Federal Specification GGG-C-406D, Type 1, Class A, light service.

Deep Reach Superclamps®

No. 48

Forged steel frame and unique design make this an excellent clamp for deep reach, medium service.

Item No.	Max. Depth*	Size Steel	Screw Dia.	Test Load (Lbs.)	Weight (Lbs.)
21201	6" x 8"	1/2" x 2"	5/8"	2,200	8-1/2
21202	8" x 12"	1/2" x 2"	3/4"	1,800	11-1/2
21204	12" x 16"	5/8" x 2"	3/4"	1,500	19-1/2

*Depth is from center of screw to frame. Conforms to Federal Specification GGG-C-406D, Type 1, Class B, medium service.

Super-Junior® Clamps

Nos. 50 through 56

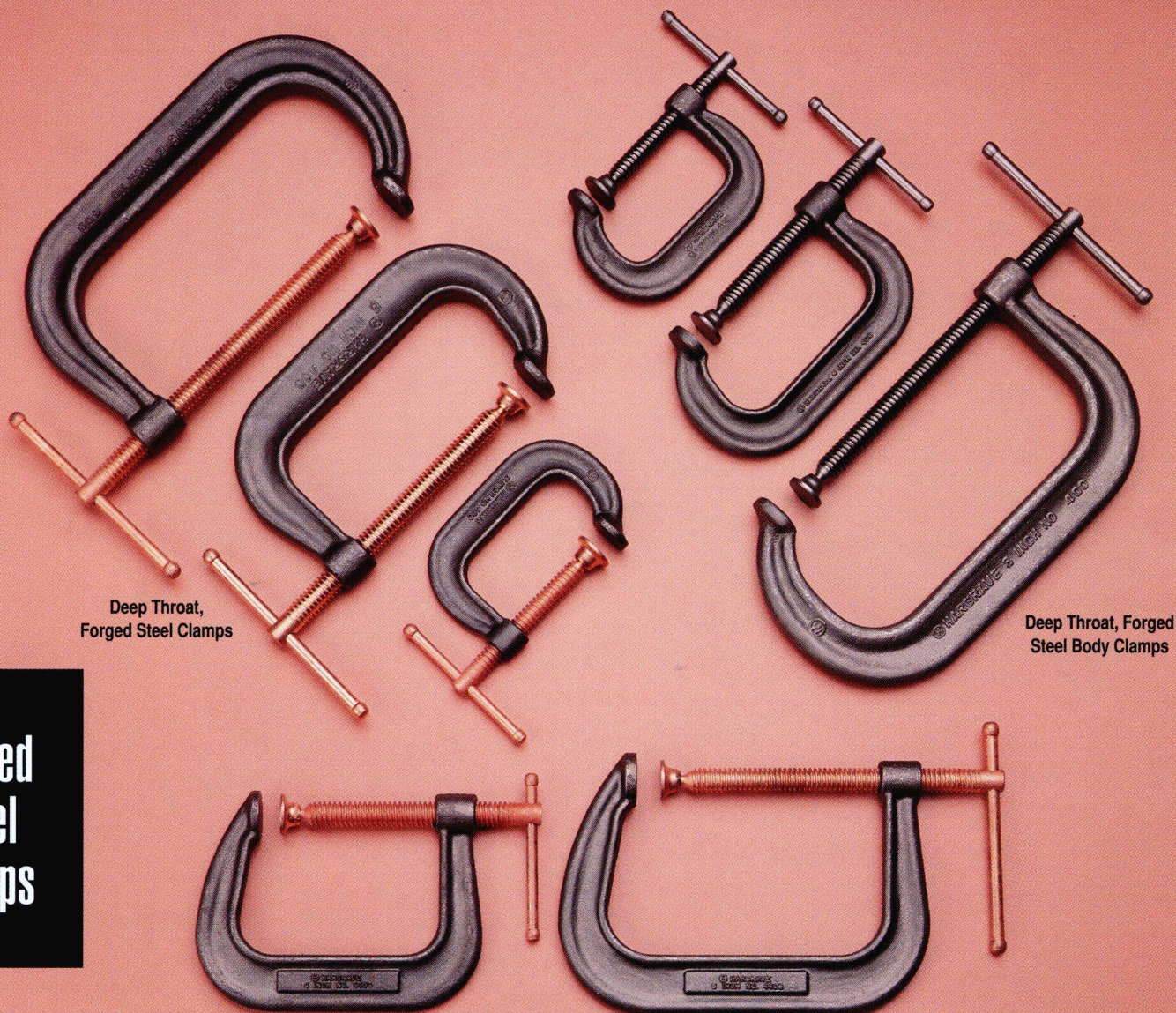
Famous since 1945. Steel screws are plated for longer life. Super-Junior "C" Clamps give more strength, longer life and greater value for all classes of work.

Item No.	Clamp No.	Opening	Depth*	Test Load (Lbs.)	Weight (Lbs.)
21301	50	1"	1"	500	1/4
21302	51	1"	1-1/2"	500	1/4
21303	52	1-1/4"	1-1/4"	800	1/4
21304	53	1-1/2"	1-1/2"	850	1/4
21305	54	2"	1-1/4"	875	1/4
21306	55	3"	1-3/8"	1,100	1/2
21307	56	2-1/2"	2-1/2"	850	1/2

*Depth is from center of screw to frame.

Conforms to Federal Specification GGG-C-406D, Type 1, Class E, very light service.

Forged Steel Clamps



Deep Throat,
Forged Steel Clamps

Deep Throat, Forged
Steel Body Clamps

Extra Deep Throat, Forged Steel Clamps

Deep Throat, Forged Steel Body Clamps No. 400

Building on over a 100 year tradition of clamp manufacturing, recent changes in frame design and material specifications allow us to offer a drop forged, heat treated clamp with exceptional appearance and strength. Threads on our screws are acme roll threaded for maximum strength and clamping force.

Item No.	Clamp No.	Opening Max.	Opening Min.	Depth*	Screw Dia.	Test Load (Lbs.)	Weight (Lbs.)
20301	402	2"	0"	2"	1/2"	3,500	1-1/2
20302	403	3"	0"	2-3/8"	5/8"	3,500	1-3/4
20303	404	4"	0"	2-3/4"	3/4"	6,500	2-3/4
20304	406	6"	0"	3-5/8"	3/4"	6,900	4-3/4
20305	408	8"	0"	4-1/2"	3/4"	6,900	8-1/2
20306	410	10"	0"	5-3/8"	7/8"	8,000	10-1/2
20307	412	12"	0"	5-3/4"	7/8"	9,500	14

*Depth is from center of screw to frame.
Conforms to Federal Specification GGG-C-406D, Type 1, Class A, light service, deep throat.

Deep Throat, Forged Steel Clamps No. 400CS

Designed for industrial applications that require strong, high quality clamps with a deep throat for maximum clearance. Drop forged steel frames are heat treated for extra strength. Spatter resisting copper plated screw, swivel and crosspin for welding applications.

Item No.	Clamp No.	Opening Max.	Opening Min.	Depth*	Screw Dia.	Test Load (Lbs.)	Weight (Lbs.)
20452	402CS	2"	0"	2"	1/2"	3,500	1-1/2
20453	403CS	3"	0"	2-3/8"	5/8"	3,500	1-3/4
20454	404CS	4"	0"	2-3/4"	3/4"	6,500	2-3/4
20456	406CS	6"	0"	3-5/8"	3/4"	6,900	4-3/4
20458	408CS	8"	0"	4-1/2"	3/4"	6,900	8-1/2
20460	410CS	10"	0"	5-3/8"	7/8"	8,000	10-1/2
20462	412CS	12"	0"	5-3/4"	7/8"	9,500	14

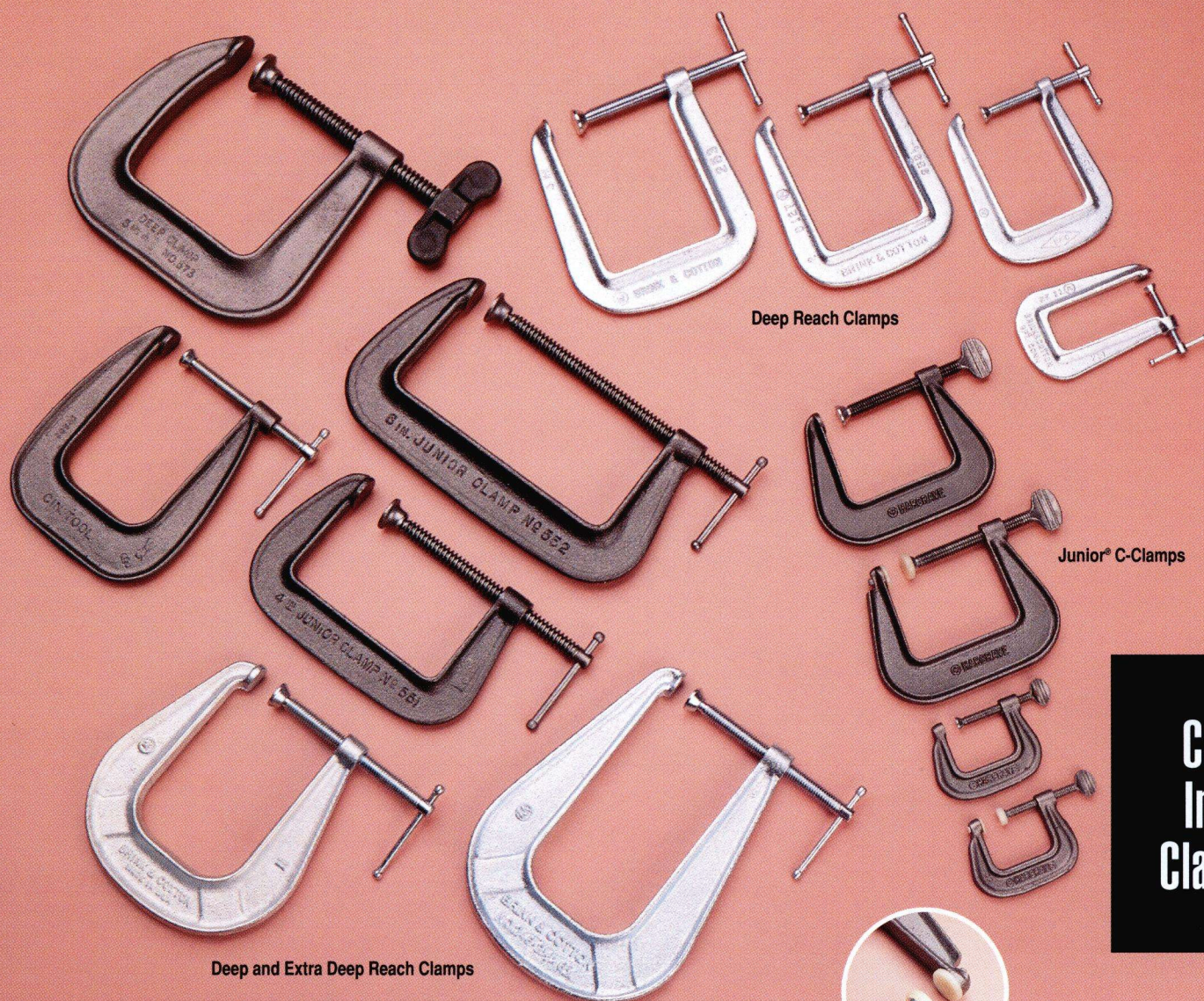
*Depth is from center of screw to frame.
Conforms to Federal Specification GGG-C-406D, Type 1, Class A, light service, deep throat.

Extra Deep Throat, Forged Steel Clamps No. 4400CS

Forged steel frame and deep throat design makes this an excellent clamp for deep reach, light service. Screw, swivel and crosspin are copper plated.

Item No.	Opening Depth*	Screw Dia.	Test Load (Lbs.)	Weight (Lbs.)
20444	4" x 4"	3/4"	4,400	4-3/4
20446	6" x 5"	3/4"	5,400	6-3/4
20448	8" x 6"	3/4"	5,900	10-3/4

*Depth is from center of screw to frame. Conforms to Federal Specification GGG-C-406D, Type 1, Class A, light service.



Deep Reach Clamps

Junior® C-Clamps

Deep and Extra Deep Reach Clamps

Cast Iron Clamps

Deep and Extra Deep Reach Clamps

Nos. 245, 246, 551, 552, 556, and 573

Deep reach pattern, ductile/malleable iron casting frames are designed especially for model and pattern making, aircraft construction and other medium clamping operations. Fine pitch steel screws are designed for constant and accurate clamping pressure.

Item No.	Clamp No.	Opening	Depth*	Test Load (Lbs.)	Weight (Lbs.)
42450	245	2-1/2"	4-3/4"	1,600	2
42460	246	2-1/2"	6-1/4"	1,600	2-1/4
22101	551	4"	2-7/8"	1,150	1-1/4
22102	552	6"	3-1/4"	650	2-1/4
22104	556	2-1/2"	4-1/2"	700	1
26301**	573	3-1/2"	4-1/2"	1,400	2-1/2
26302**	573	4-1/2"	4-1/2"	1,400	3
26303**	573	6-1/2"	4-1/2"	2,000	4

*Depth is from center of screw to frame. **Wing type handle.

Deep Reach Clamps

250 Series

An inexpensive, light service, deep reach clamp. Ductile iron castings, steel screw and sliding pin.

Item No.	Clamp No.	Opening	Throat Depth	Screw Dia.	Test Load (Lbs.)	Weight (Lbs.)
42510	251	1"	3"	1/4	350	1/4
42520	252	2"	3-1/2"	5/16	450	1/2
42525	252-1/2	2-1/2"	4"	3/8	600	1
42530	253	3"	4-1/2"	7/16	700	1-1/4

Junior® C-Clamps

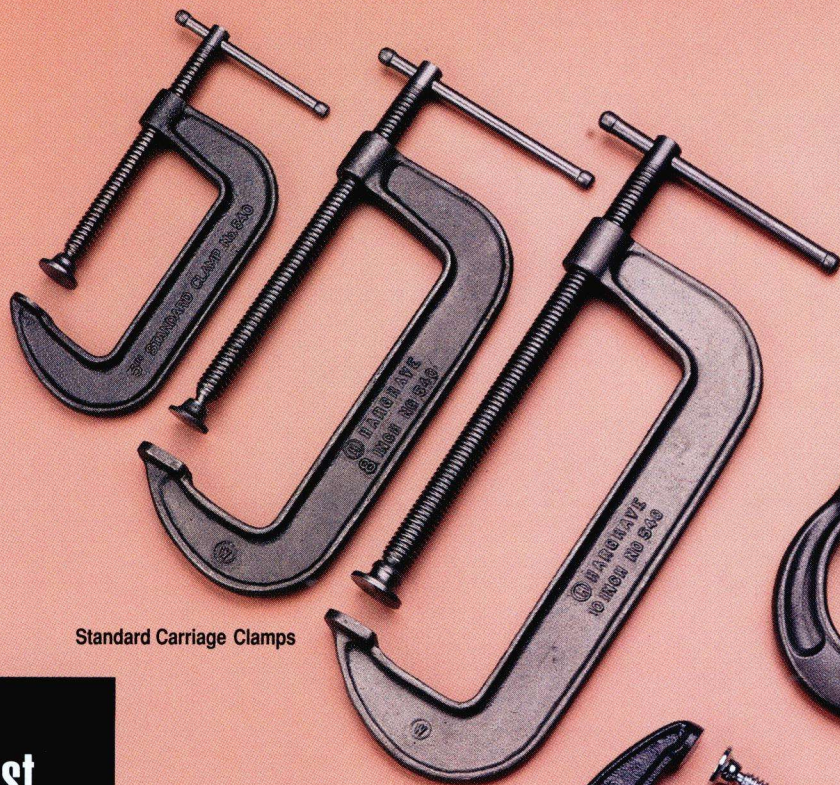
Nos. 566 and 568

Ductile/malleable iron castings are designed for close work in pattern and mold making. Used extensively in the aircraft/aerospace industry because of their weight to strength ratio. Clamps listed with "N" suffix have nylon caps on the tips and nylon insets securely fixed to the foot of the clamp.

Item No.	Clamp No.	Opening	Depth*	Test Load (Lbs.)	Weight (Lbs.)
22105	566	1-1/4"	1-1/4"	450	1/4
22115	566N	1-1/4"	1-1/4"	450	1/4
22106	568	2-1/2"	2-1/2"	550	1/2
22116	568N	2-1/2"	2-1/2"	550	1/2

*Depth is from center of screw to frame.

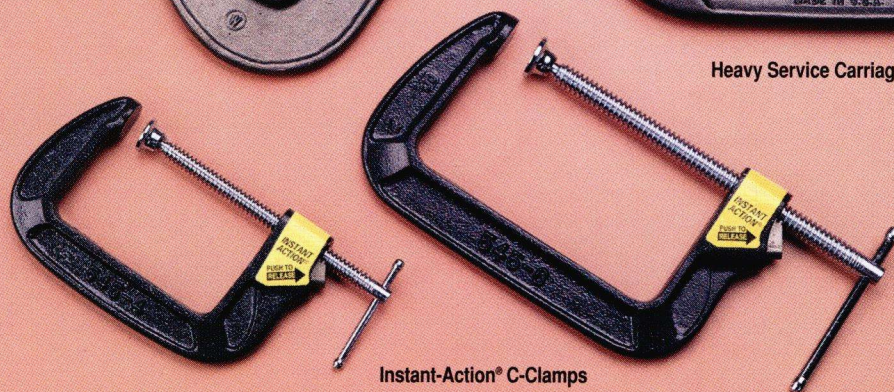
Cast Iron Clamps



Standard Carriage Clamps



Heavy Service Carriage Clamps



Instant-Action® C-Clamps

Standard Carriage Clamps

No. 540

Our specialty since 1891. Frames made from high strength, ductile iron castings for greatest strength. Superior design provides sliding pin (vise type) handle, single acme thread screw and oscillating ball and socket tip. Frame shaped for greatest strength for weight.

Item No.	Opening	Depth*	Screw Dia.	Test Load (Lbs.)	Weight (Lbs.)
22001	2-1/2"	1-3/4"	1/2"	1,100	1/2
22002	3"	1-7/8"	1/2"	1,800	1-1/4
22003	4"	2-1/16"	5/8"	2,150	1-1/2
22004	5"	2-1/2"	5/8"	2,250	2-1/4
22005	6"	2-3/4"	5/8"	2,450	2-1/2
22006	8"	3-1/4"	3/4"	2,750	3-1/2
22007	10"	3-5/8"	7/8"	2,250	6-1/2
22008	12"	3-5/8"	7/8"	2,850	8
22009	14"	3-3/4"	7/8"	2,850	9

*Depth is from center of screw to frame.

Instant-Action® C-Clamps

No. 545

These rugged, ductile iron frame C-clamps have an instant action mechanism for quick release. By depressing the button near the screw, you disengage the screw from the threaded trigger, allowing you to quickly reposition the swivel pad.

Item No.	Opening Max.	Min.	Depth*	Screw Dia.	Test Load (Lbs.)	Weight (Lbs.)
45454	4-1/2"	0"	3"	1/2"	2,400	2-1/2
45456	6-5/8"	0"	3-3/4"	5/8"	2,600	3

*Depth is from center of screw to frame.

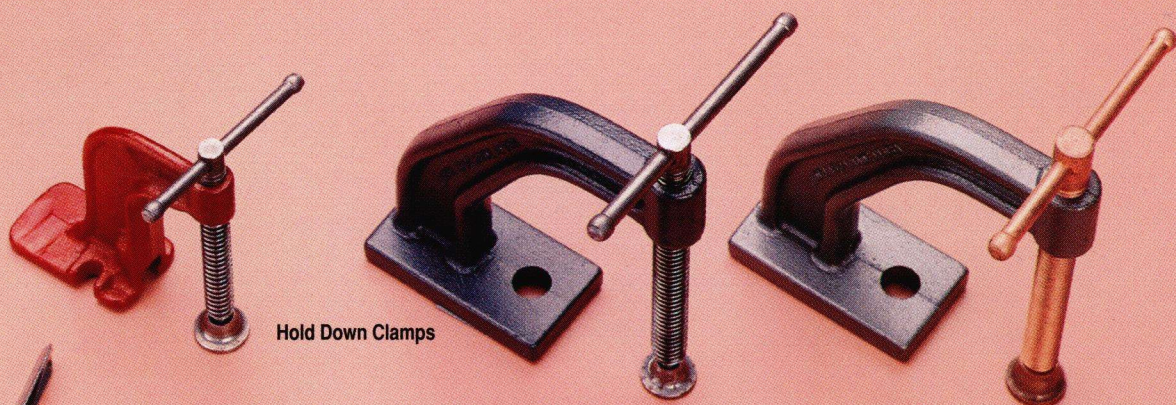
Heavy Service Carriage Clamps

No. 300

Frames made from high strength, specially designed, ductile iron castings for significantly improved load characteristics. Ideally suited for industrial applications calling for the strength of a forged clamp at cast clamp pricing. Deep throat for maximum clearance. Natural finish.

Item No.	Opening Max.	Min.	Depth*	Screw Dia.	Test Load (Lbs.)	Weight (Lbs.)
22302	2"	0"	2"	1/2"	2,700	1-1/2
22303	3"	0"	2-3/8"	1/2"	2,800	1-3/4
22304	4"	0"	2-5/8"	5/8"	3,200	2-3/4
22306	6"	0"	3-1/2"	3/4"	4,300	4-1/4
22308	8"	0"	4-3/8"	3/4"	4,500	7
22310	10"	0"	5-1/4"	7/8"	5,000	8
22312	12"	0"	5-3/4"	7/8"	7,500	15

*Depth is from center of screw to frame.



Hold Down Clamps



Original Hargrave® Spring Clamps



Brink & Cotton® Spring Clamps

Brink & Cotton® Spring Clamps with Vinyl Handles and Tips



The Gripper

Spring/ Hold Down Clamps

Original Hargrave® Spring Clamps

Heavy gauge steel shaped to provide easy hand grip. Treated finish, high grade tempered steel spring holds firmly without marring finish. Can be applied or removed instantly.

Item No.	Clamp No.	Max Opening	Weight (Lbs.)	Opening	Reg. Spring (Lbs.)	Overall Length
20111	1	1"	1/4	1"	27	4-1/16"
20112	2	2"	1/2	2"	40	6"
				Half Open	18	
				Half Open	22	

Brink & Cotton® Spring Clamps

Lightweight, inexpensive tools with countless uses for assembly and repair around the home and shop. The pressure applied by the tips is sufficient for gluing or dry assembly. Heavy gauge steel jaws are black oxide. Tempered steel springs.

Item	Clamp	Opening	Weight (Lbs.)
40010	1	1"	1/4
40020	2	2"	1/2
40030	3	3"	3/4

Brink & Cotton® Spring Clamps with Vinyl Handles and Tips

Lightweight, inexpensive tools with countless uses for assembly and repair around the home and shop. The pressure applied by the tips is sufficient for gluing or dry assembly. Heavy gauge steel jaws are black oxide. Tempered steel springs. Includes vinyl handles and tips to prevent marring work.

Item No.	Clamp No.	Opening	Weight (Lbs.)
40016	1HT	1"	1/4
40026	2HT	2"	1/2
40036	3HT	3"	1

The Gripper

Fiberglass-reinforced nylon design is chemically inert, nonconductive and static free. Suited for aircraft/aerospace, circuit board, clean room, plating, automotive and many other applications.

Item No.	Opening	Length	Clamping Pressure (Lbs.)	Weight (Lbs.)
20105	1-1/4"	4-3/4"	27	1/4

Hold Down Clamps

Ductile iron frames with rolled thread, steel screw and crosspin.

Model 1603 furnished with two bolts for mounting anywhere on a workbench or work table.

Model 1634 designed for work on standard T slot work tables, welder's platens, drill presses or metal workbenches. Model 1634CS furnished with copper plated screw, swivel and crosspin for welding applications.

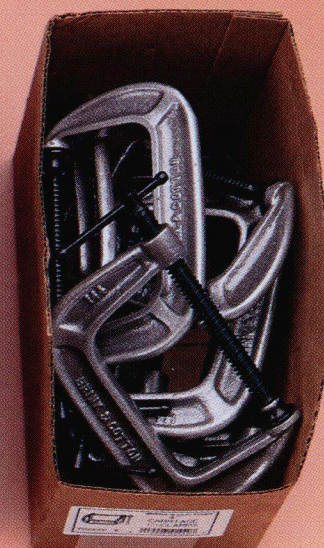
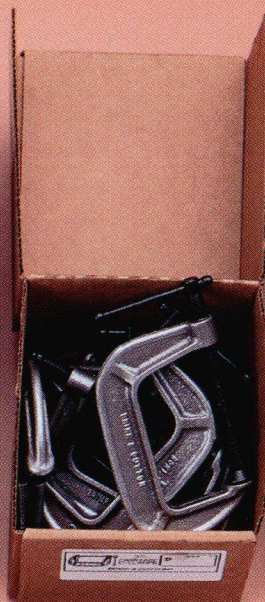
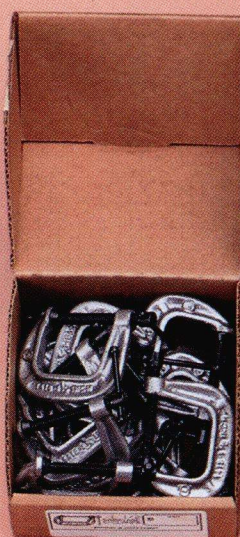
Item No.	Clamp No.	Opens Inches	Weight (Lbs.)
41603	1603	3	2-1/2
41634	1634	4-1/4"	6
41635	1634CS	4-1/4"	6

As per spec

Cast Clamps



Craft C-Clamps



Carriage Clamps



Mini C-Clamp Set



Carriage Clamps - Carded

Mini C-Clamp Set

No. 110SP

Special alloy, die cast frame with knurled knob handles for precision assembly and repair. Two clamps per card.

Item No.	Clamp No.	Opening	Throat Depth	Screw Dia.	Weight (Lbs.)
41100	110SP	3/4"	5/8"	7/32"	1/4

Craft C-Clamps

110 Series

Light duty C-clamps designed for the home craftsman. Bar coded.

Item No.	Clamp No.	Opening	Throat Depth	Screw Dia.	Weight (Lbs.)
41110	111	1"	3/4"	7/32"	1/4
41120	112	2"	1"	1/4"	1/4
41125	112-1/2	2-1/2"	1-1/4"	5/16"	1/4
41130	113	3"	1-1/2"	3/8"	1/2
41140	114	4"	2"	7/16"	1
41150	115	5"	2-1/4"	1/2"	1-1/2
41160	116	6"	2-1/2"	1/2"	2

Carriage Clamps

140 Series

The "original" carriage clamp designed for the home craftsman, woodworker and light industrial service. Most popular C-clamp style for over 50 years. Rugged malleable and ductile iron frames with black oxide screws, swivels and sliding crosspin handles. Bar coded.

Item No.	Clamp No.	Opening	Throat Depth	Screw Dia.	Weight (Lbs.)
41410	141	1"	1-1/16"	1/4"	1/4
41415	141-1/2	1-1/2"	1-1/2"	5/16"	1/4
41420	142	2"	1-1/8"	5/16"	1/4
41422	1422	2-1/2"	1-7/16"	3/8"	1/2
41425	142-1/2	2-1/2"	2-1/2"	3/8"	3/4
41430	143	3"	2"	7/16"	3/4
41440	144	4"	2-3/4"	9/16"	1-1/2
41450	145	5"	3"	5/8"	2-1/4
41460	146	6"	3-1/4"	5/8"	2-3/4
41480	148	8"	4"	3/4"	4

Carriage Clamps - Carded

140 Series

Rugged malleable/ductile iron frames make this carriage clamp ideal for woodworking, light industrial service and the home craftsman. Mounted on hang cards for attractive point of sale display.

Item No.	Clamp No.	Opening	Throat Depth	Screw Dia.	Weight (Lbs.)
41411	141C	1"	1-1/16"	1/4"	1/4
41416	141-1/2C	1-1/2"	1-1/2"	5/16"	1/4
41421	142C	2"	1-1/8"	5/16"	1/4
41423	1422C	2-1/2"	1-7/16"	3/8"	1/2
41426	142-1/2C	2-1/2"	2-1/2"	3/8"	3/4
41405	143C	3"	2"	7/16"	3/4
41406	144C	4"	2-3/4"	9/16"	1-1/2
41407	145C	5"	3"	5/8"	2-1/4
41408	146C	6"	3-1/4"	5/8"	2-3/4
41409	148C	8"	4"	3/4"	4



Cast Clamps

Craft Clamp Set

No. 1194

Contains the most popular craft clamps. Attractive point of sale packaging. Great for promotions.

Item No.	Clamp No.	Description	Contents	Weight (Lbs.)
41194	1194	4 Piece C-Clamp Set	Two Each - Nos. 112 and 113	1-1/2

Carriage Clamp Sets

1490 Series

Each set contains the most popular carriage clamps. Attractive point of sale packaging. Great items for promotions.

Item No.	Clamp No.	Description	Contents	Weight (Lbs.)
41493	1493	3 Piece C-Clamp Set	One Each - Nos. 141, 142 and 143	1-1/4
41494	1494	4 Piece C-Clamp Set	Two Each - Nos. 142 and 143	2-1/4

3 Way Edging Clamp

No. 243

Provides a convenient and practical method for applying "right angle" pressure to the edge or side of work for holding or repairing molding, trim and decorative strips. Rugged, bright plated frames with steel screws, swivels and sliding crosspin handles.

Item No.	Clamp No.	Opening	Throat Depth	Weight (Lbs.)
42431	243B	2-1/2"	2-3/8"	3/4

3 Way Edging Clamp - Carded

No. 243

Provides a convenient and practical method for applying "right angle" pressure to the edge or side of work for holding or repairing molding, trim and decorative strips. Rugged, bright plated frames with steel screws, swivels and sliding crosspin handles. Carded.

Item No.	Clamp No.	Opening	Throat Depth	Weight (Lbs.)
42430	243	2-1/2"	2-3/8"	1

Corner Clamp

No. 8404

Clamps miter or butt joints at true 90° angle. Ideal for making picture frames, cabinets, molding and trim. Holds work up to 3" in width leaving joints fully exposed for nailing, gluing and doweeling. Two countersunk holes permit mounting to a workbench.

Item No.	Clamp No.	Opening	Weight (Lbs.)
48405	8404B	3"	1-1/4

Corner Clamp - Carded

No. 8404

Clamps miter or butt joints at true 90° angle. Ideal for making picture frames, cabinets, molding and trim. Holds work up to 3" in width leaving joints fully exposed for nailing, gluing and doweeling. Two countersunk holes permit mounting to a workbench. Carded.

Item No.	Clamp No.	Opening	Weight (Lbs.)
48404	8404	3	1-1/4

Special Purpose Clamps



Web Clamp

Handscrows

4-Corner
Frame Clamps

Web Clamp No. 891

Applies even clamping pressure around large or irregularly shaped work that is difficult to hold with conventional clamps. 15' long, 1" wide nylon webbing will not mar work. Includes four steel miter corners to hold 90° joints and a handy steel wrench for easy tightening. Features quick lock adjustment. Used for making picture frames, furniture repair, cabinet work and tying down loads. Carded. Imported.

Item	Clamp	Web	Weight (Lbs.)
48910	891	15'	1

4-Corner Frame Clamps – Boxed 87 Series

Clamps all four corners of square and rectangular frames and cabinets with equal pressure without marring the work. Particularly suited to the mitered corners of picture frames. Precision die cast corner blocks with plated 1/4" steel screws, adjusting nuts and connectors. Includes full instructions and suggested applications.

Item	Clamp	Capacity	Weight (Lbs.)
48724	8724	3" x 3" 24" x 24"	2-1/4
48748	8748	3" x 3" 48" x 48"	3-1/2

Handscrows

Designed for the craftsman who needs evenly controlled clamping pressure for gluing or assembly work with the minimum possibility of marring fine finishes. Easily adjusted to conform to nonparallel surfaces. Jaws are of select straight grain kiln dried maple, seasoned and oiled. Cold drawn steel spindles with quick acting, double lead thread. Handscrows are suitable for boat building, woodworking, school shops, and furniture and cabinet making.

Item No.	Clamp No.	Jaw Length	Max. Jaw Opening	Throat Depth	Weight (Lbs.)
49006	006	6"	3"	3"	1-1/4
49008	008	8"	4-1/2"	4-1/4"	2
49010	010	10"	6"	5-1/4"	2-1/2
49012	012	12"	8-1/2"	6"	4-1/4
49014	014	14"	10"	7"	5-1/4



Heavy Duty
Clamping System

3 Clamps In 1
Bar Clamp Set

The Gripper
Clamp Set

Special
Purpose
Clamps

Heavy Duty Clamping System No. 620S

This ready to use system includes a 600 Clamp Fixture, Clamp Pads and a 12" length of black iron pipe. Sliding jaw has hardened steel cam design and will not slip under pressure or stick when pressure is released. Packaged as a kit for easy display.

Item No.	Clamp No.	Description	Contents	Weight (Lbs.)
46000	620S	3 Piece Clamp Set	One Each - No.600, Clamping Pads and Black Iron Pipe	3-1/2

3 Clamps In 1 Bar Clamp Set No. 32S

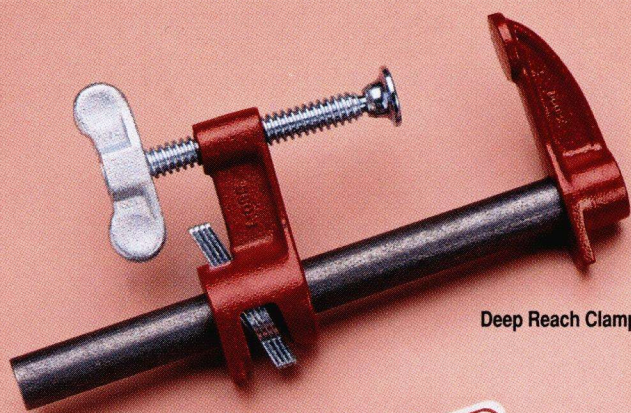
This versatile kit comes with an 18" 32 Series Steel Bar Clamp complete and 6" and 12" 32 Series rails. Ideal for light duty, general clamping applications. Multiple disc clutch provides quick adjustment, secure hold and instant release. Packaged as a kit for easy display.

Item No.	Clamp No.	Description	Contents	Weight (Lbs.)
43200	32S	4 Piece Clamp Set	One Each - 18" 32 Series Steel Bar Clamp and 6" & 12" 32 Series rails	3-1/2

The Gripper Clamp Set No. 2GS

These clamps are fiberglass reinforced nylon and are chemically inert, nonconductive and static free. They have a clamping pressure of 27 lbs. Set of 6 is packaged as a kit for easy display.

Item No.	Clamp No.	Description	Contents	Weight (Lbs.)
40115	2GS	6 Piece Clamp Set	Six Each - The Gripper	1



Deep Reach Clamp Fixture



Work Protecting Clamp Pads



Stand up Clamp Pads

Clamp Fixtures

Deep Reach Clamp Fixture

No. 560

Clamp fixture designed for a deep reach. Mounts on 3/4" black threaded pipe to make a bar clamp of any length. May be mounted in reverse position to push or spread work apart. Multiple disc clutch provides quick adjustment, secure hold and instant release. Wing nut handle for working in close quarters. Jaws have attractive red enamel finish. Boxed.

Item No.	Clamp No.	Clamping Slide	Surface Tip	Weight (Lbs.)
45600	560	3/4"	2-1/2"	2-1/2

Work Protecting Clamp Pads

No. 570

These specially designed pads are specifically made for Brink & Cotton clamp fixtures and bar clamps, but can be modified to fit any clamp face up to 1-3/4" wide. Pads provide a protective cushion between the finished wood and the metal clamp jaws. Easy to slip on or off, these pads eliminate the need for locks and prevent material slipping. Carded.

Item No.	Pad No.	Pads Per Set	Weight (Lbs.)
45700	570	4	1/4

Stand up Clamp Pads

No. 580

Designed to fit any standard clamp fixture used on 3/4" pipe. These pads provide a protective cushion between the work surface and the metal clamp jaws. They eliminate the need for wood blocks, separate pads and saddles. Prevents material from slipping. Carded.

Item No.	Pad No.	Pads Per Set	Weight (Lbs.)
45800	580	2	1/4

Bar Clamps

Light Service Steel Bar Clamps

Standard Service Steel Bar Clamps

Light Service Steel Bar Clamps (Interchangeable)

Light Service Steel Bar Clamps

32 Series

Light duty steel bar clamps designed for general clamping applications. Multiple disc clutch provides quick adjustment, secure hold and instant release. 1/4" x 3/4" steel bar. 3/4" swivel. 2-1/2" throat depth. Jaws have attractive red enamel finish.

Item	Clamp	Opening	Weight (Lbs.)
43206	3206	6"	1-1/2
43212	3212	12"	2
43218	3218	18"	2
43224	3224	24"	2-1/2
43230	3230	30"	3
43236	3236	36"	3

Light Service Steel Bar Clamps

32 Series (Interchangeable)

Interchangeable bar clamp system allows use of master fixture set on any length bar. Fixture set includes head-stock, tail-stock and head pins for mounting on standard 32 Series bar. Now you will never have to use the wrong length bar clamp again.

Item No.	Clamp	Throat Depth	Weight (Lbs.)
32000	Master Fixture Set	2-1/2"	1
Item No.	Bar Clamp Rail – Opening		Weight (Lbs.)
32006		6"	1/2
32012		12"	1
32018		18"	1
32024		24"	1-1/2
32030		30"	2
32036		36"	2

Standard Service Steel Bar Clamps

33 Series

Regular duty steel bar clamps designed for general clamping applications. Multiple disc clutch provides quick adjustment, secure hold and instant release. 5/16" x 1" steel bar. 1" swivel. 3-1/2" throat depth. Jaws have attractive red enamel finish.

Item	Clamp	Opening	Weight (Lbs.)
43306	3306	6"	2-1/2
43312	3312	12"	3-1/2
43318	3318	18"	4
43324	3324	24"	4-1/2
43336	3336	36"	5-1/2

Bar Clamps

Regular Duty "I" Bar Clamps

No. 640

72 Series

Deep Reach
Steel Bar Clamps

Deep Reach Steel Bar Clamps

35 Series

Heavy service steel bar clamps designed for clamping applications which require an extra deep 5" throat. Multiple disc clutch provides quick adjustment, secure hold and instant release. 3/8" x 1-1/4" steel bar. 1-1/4" swivel. Jaws have attractive red enamel finish.

Item	Clamp	Opening	Weight (Lbs.)
43506	3506	6"	4-1/2
43512	3512	12"	5-1/2
43518	3518	18"	6-1/2
43524	3524	24"	7
43530	3530	30"	8
43536	3536	36"	8-1/2

Regular Duty "I" Bar Clamps

72 Series

Carbon steel "I" bar provides maximum strength for standard and extra long openings. Multiple disc clutch allows quick adjustment, secure hold and instant release. Clamping surface is 2" deep and 1-3/4" wide. Bar dimension is 7/16" x 1-1/2" x 5/32".

Item No.	Opening	Weight (Lbs.)
47224	2'	7
47230	2-1/2'	7-1/2
47236	3'	8
47248	4'	9-1/2
47260	5'	10-1/2
47272	6'	12
47284	7'	13
47296	8'	14-1/2

Conforms to Federal Specification GGG-C-406D, Type III, Class A.

Regular Duty "I" Bar Clamps

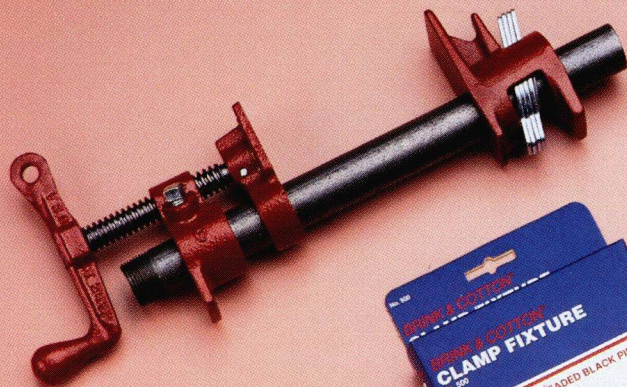
No. 640

No other clamp has this patented locking device. A rapid acting powerful clamp designed and constructed for hard, everyday production work. Bar is shaped to provide great strength for its weight. Smooth, wide flange will not mar working surfaces. Patented, quick action, no slip notches are 3/4" apart and formed in the web for greater bar strength. High-strength ductile slide cannot slip or bind. Easily released. Compressed metal pawl engages notches; insures positive stop, years of trouble-free service. Clamping surface is 1-13/16" deep x 1-7/8" wide, screw diameter is 5/8" and bar dimension is 7/16" x 1-1/2" x 5/32".

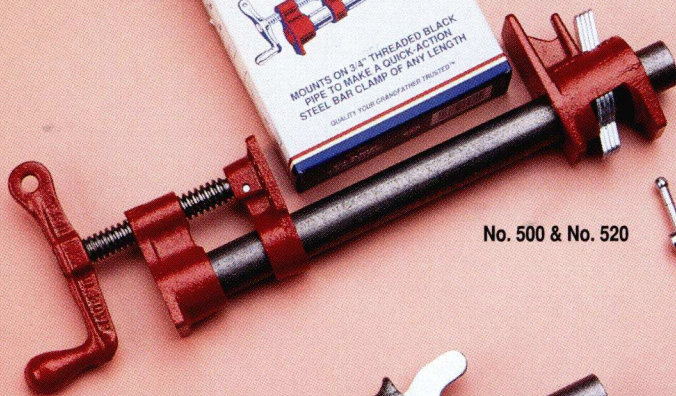
Item No.	Opening	Test Load (Lbs.)	Weight (Lbs.)
21801	2'	6,000	7
21802	2-1/2'	6,000	7-1/2
21803	3'	6,000	8
21804	4'	6,000	9-1/2
21805	5'	6,000	10-1/2
21806	6'	6,000	12
21807	7'	6,000	13
21808	8'	6,000	14-1/2

Conforms to Federal Specification GGG-C-406D, Type III, Class A.

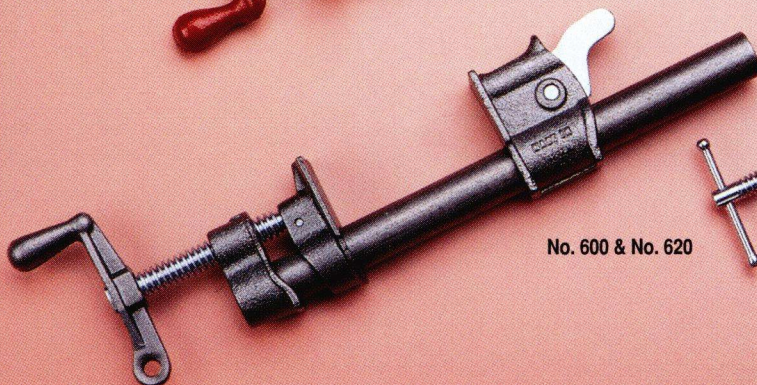
Clamp Fixtures



No. 400 & No. 420



No. 500 & No. 520



No. 600 & No. 620

Clamp Fixtures

No. 400 (fits 3/4" threadless pipe)

No. 420 (fits 1/2" threadless pipe)

Easy to assemble on any length pipe. All parts are high strength iron and finished in attractive red enamel, except the screw, which is steel. Hardened steel set screw holds the stationary jaw firmly at any position on the pipe. Multiple disc clutch provides sliding jaws with instant adjustment, secure hold and quick release.

Item No.	Clamp No.	Clamping Slide	Surface Tip	Weight (Lbs.)
44000	400	3/4"	1-3/4"	2-1/2
44200	420	1/2"	1-1/2"	1-1/2

Clamp Fixtures

No. 500 (fits 3/4" pipe)

No. 520 (fits 1/2" pipe)

Easy to assemble on any length pipe. All parts are high strength iron and finished in attractive red enamel, except the screw, which is steel. Multiple disc clutch provides instant adjustment, secure hold and quick release.

Item No.	Clamp No.	Clamping Slide	Surface Tip	Weight (Lbs.)
45000	500	3/4"	1-3/4"	2-1/2
45200	520	1/2"	1-1/2"	1-1/2

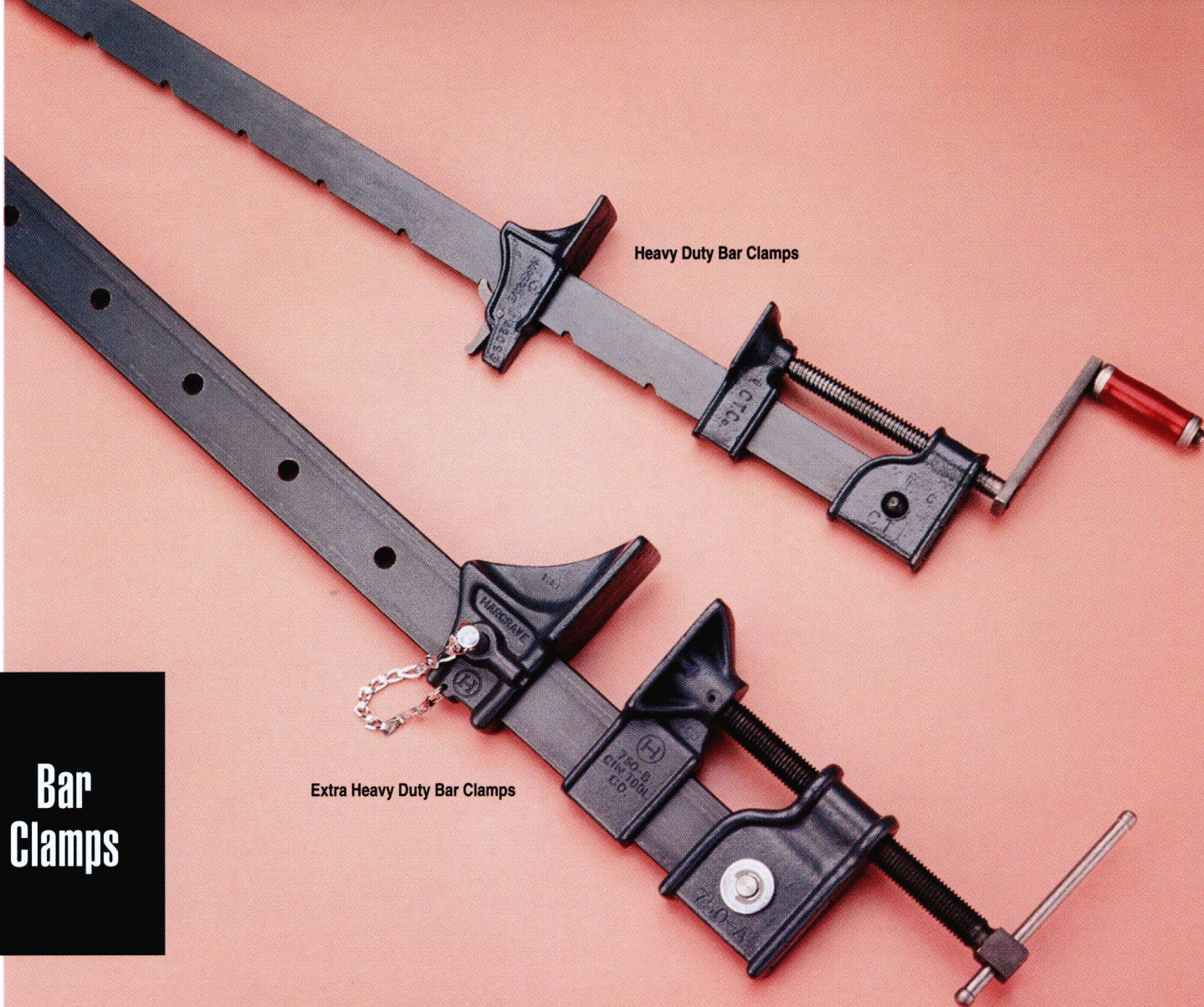
Clamp Fixtures

No. 600 (fits 3/4" pipe)

No. 620 (fits 1/2" pipe)

Easy to assemble on any length pipe. All parts are high strength iron and finished in attractive gray enamel, except the screw, which is steel, and the cam, which is hardened steel. Extra heavy black iron pipe is recommended for ordinary clamping, and double extra when greater pressure is required. Slide will not slip under pressure; will not stick when pressure is released. Frame tapped for standard pipe thread.

Item No.	Clamp No.	Clamping Slide	Surface Tip	Weight (Lbs.)
22201	600	1-3/4"	1-3/4"	2-1/2
22202	620	1-1/2"	1/2"	1-1/2



Bar Clamps

Heavy Duty Bar Clamps

No. 450

The bar is high carbon manganese steel for greater strength. The frame, slide and tip are the best grade malleable iron available. Pawl is designed from tempered steel for quick release and no bind operation. Has case hardened thrust bearing for end of screw, insuring long, satisfactory service. The screw is steel, with deep cut acme thread and extra long bearing; insures added life to the clamp. The handle is steel, with wood grip, reinforced with heavy steel ferrule and cap to prevent breaking. Bar dimension is 3/8" x 1-3/4".

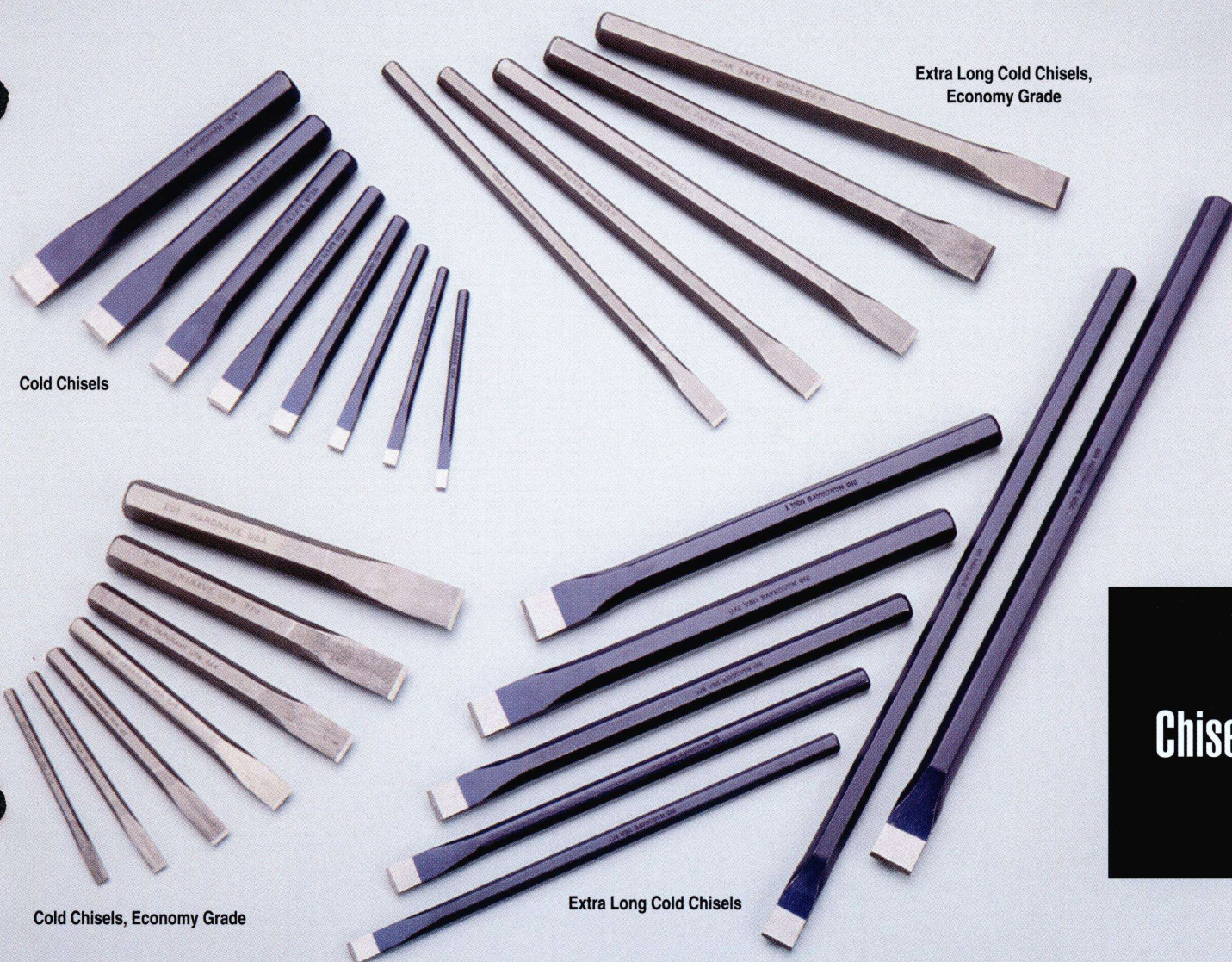
Item No.	Opening	Clamping Surface	Screw Dia.	Test Load (Lbs.)	Weight (Lbs.)
21602	4'	2-1/4" x 2-1/4"	3/4"	8,000	15
21604	6'	2-1/4" x 2-1/4"	3/4"	8,000	20
21606	8'	2-1/4" x 2-1/4"	3/4"	8,000	24

Extra Heavy Duty Bar Clamps

No. 750 for Heavy Steel Fabrication

The strongest and heaviest bar clamp made. Frame, tip and slide made of high grade malleable iron. Holes spaced 4" on center. Clamping surface is 4" deep x 3" wide. Screw diameter is 1". Bar dimension is 5/8" x 2-1/2". Note weight before ordering.

Item No.	Opening	Test Load (Lbs.)	Weight (Lbs.)
21902	4'	15,000	38
21904	6'	15,000	48
21906	12'	15,000	76



Chisels

Cold Chisels

No. 200

Forged from high quality, carbon alloy tool steel. These chisels should be used for cutting, shaping and removing metal softer than the cutting edge itself (metals such as cast iron, wrought iron, steel, bronze, copper, etc.).

Item No.	Cutting Edge	Stock Size	Length
22501	1/4"	1/4"	5"
22502	5/16"	1/4"	5"
22503	3/8"	5/16"	5-1/2"
22504	1/2"	7/16"	6"
22505	5/8"	1/2"	6-1/2"
22506	3/4"	5/8"	7"
22507	7/8"	3/4"	7-1/2"
22508	1"	7/8"	8"

Cold Chisels, Economy Grade

No. 201

Our No. 200 furnished without polished ends and enamel paint.

Item No.	Cutting Edge	Stock Size	Length
22551	1/4"	1/4"	5"
22552	5/16"	1/4"	5"
22553	3/8"	5/16"	5-1/2"
22554	1/2"	7/16"	6"
22555	5/8"	1/2"	6-1/2"
22556	3/4"	5/8"	7"
22557	7/8"	3/4"	7-1/2"
22558	1"	7/8"	8"

Extra Long Cold Chisels

No. 210

Used same as No. 200 when extra length is needed.

Item No.	Cutting Edge	Stock Size	Length
22602	1/2"	7/16"	12"
22603	5/8"	1/2"	12"
22604	3/4"	5/8"	12"
22605	3/4"	3/4"	12"
22606	1"	3/4"	12"
22607	3/4"	5/8"	18"
22608	1"	3/4"	18"

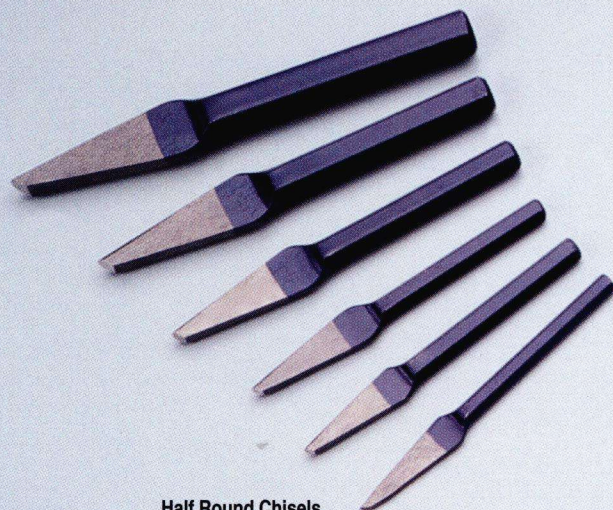
Extra Long Cold Chisels, Economy Grade

No. 211

Our No. 210 furnished without polished ends and enamel paint.

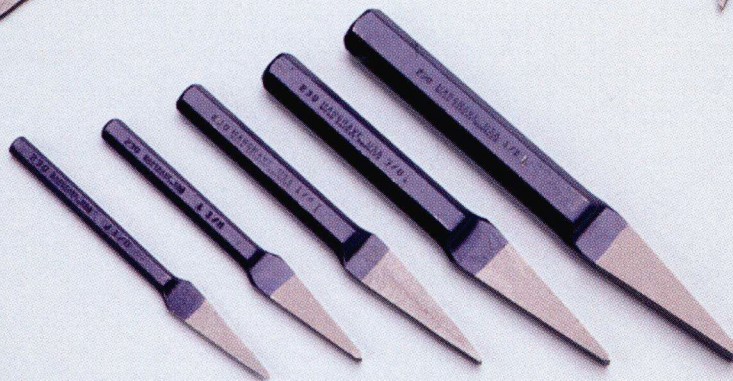
Item No.	Cutting Edge	Stock Size	Length
22652	1/2"	7/16"	12"
22653	5/8"	1/2"	12"
22654	3/4"	5/8"	12"
22655	7/8"	3/4"	12"
22656	1"	3/4"	12"

Chisels



Half Round Chisels

Half Round Chisels,
Economy Grade



Cape Chisels

Cape Chisels

No. 230

Forged from high quality, carbon alloy tool steel. These chisels should be used for cutting in locations such as grooves, key ways, and slots.

Item No.	Cutting Edge	Stock Size	Length
22701	1/8"	5/16"	5-1/2"
22702	3/16"	3/8"	5-1/2"
22703	1/4"	3/8"	5-1/2"
22704	5/16"	1/2"	6-1/4"
22705	3/8"	5/8"	7"
22706	1/2"	3/4"	8"

Half Round Chisels

No. 240

Forged from high quality, carbon alloy tool steel. These chisels should be used for cutting round or semi circular grooves, and for chipping inside corners which are "filleted" or rounded.

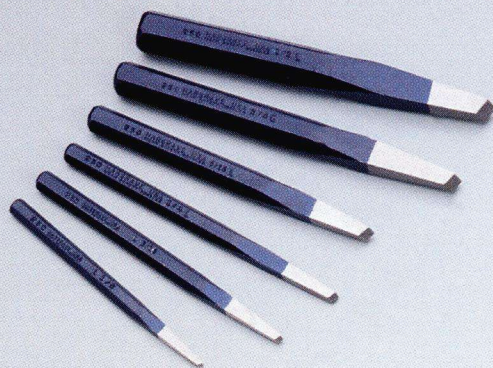
Item No.	Cutting Edge	Stock Size	Length
22801	1/8"	5/16"	5-1/2"
22802	3/16"	3/8"	5-1/2"
22803	1/4"	3/8"	5-1/2"
22804	5/16"	1/2"	6-1/4"
22805	3/8"	5/8"	7"
22806	1/2"	3/4"	8"

Half Round Chisels, Economy Grade

No. 241

Our No. 240 furnished without polished ends and enamel paint.

Item No.	Cutting Edge	Stock Size	Length
22851	1/8"	5/16"	5-1/2"
22852	3/16"	3/8"	5-1/2"
22853	1/4"	3/8"	5-1/2"
22854	5/16"	1/2"	6-1/4"
22855	3/8"	5/8"	7"



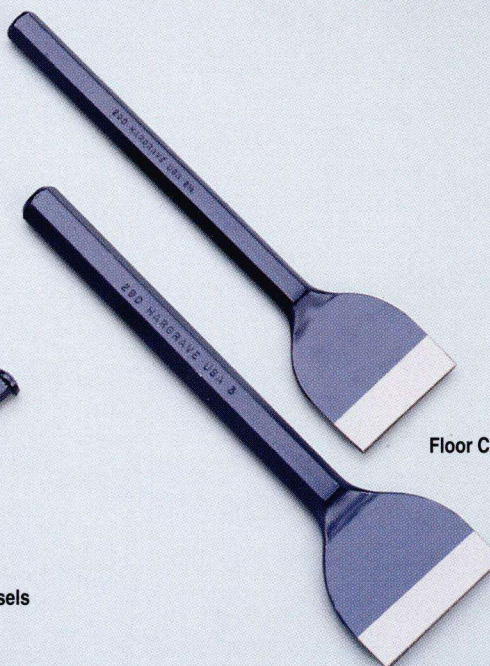
Diamond Point Chisels



All Steel Rectangular Brick Chisel



All Steel Wood Chisels



Floor Chisels

Chisels

Diamond Point Chisels

No. 250

Forged from high quality, carbon alloy tool steel. These chisels should be used for cutting V grooves, inside corners, and square holes.

Item No.	Cutting Edge	Stock Size	Length
22901	1/8"	5/16"	5"
22902	3/16"	3/8"	5-1/2"
22903	1/4"	3/8"	5-3/4"
22904	5/16"	1/2"	6"
22905	3/8"	5/8"	7"
22906	1/2"	3/4"	7"

All Steel Wood Chisels

No. 260

Due to quality and temper of steel, this chisel will not break or take a set when used as intended. Handle will stand use of hammer without breaking—much more durable than wood handle chisel. Used as a heavy duty, wood cutting tool.

Item No.	Cutting Edge	Stock Size	Length
23000	1/4"	5/16"	7"
23001	1/2"	3/8"	7-1/2"
23002	3/4"	1/2"	8-1/4"
23003	1"	5/8"	8-3/4"

All Steel Rectangular Brick Chisel

No. 280

Forged from high quality, carbon alloy tool steel. These chisels should be used for trimming brick.

Item No.	Cutting Edge	Stock Size	Length
23501	1-1/8"	3/8" x 7/8"	12"

Floor Chisels

No. 290

Due to design, quality and temper of steel, this chisel will not break or take a set when used as intended. The thin blade enables carpenter, plumber or electrician to cut tongues off floor boards and lift them without marring the surface. Blade tempered to cut nails.

Item No.	Cutting Edge	Stock Size	Length
23601	2-1/2"	5/8"	11"
23602	3"	3/4"	12"



Center Punches



Prick Punches



Center Punches, Economy Grade

Punches

Center Punches

No. 300

Made from high quality, carbon alloy tool steel. These punches are used for marking work by indentation for starting drills in metal and other materials.

Item No.	Cutting Edge	Stock Size	Length
24101	5/64"	1/4"	3-1/2"
24102	1/8"	5/16"	4-1/4"
24103	5/32"	3/8"	5"
24104	1/4"	1/2"	6"
24105	3/8"	5/8"	6-1/4"

Center Punches, Economy Grade

No. 301

Our No. 300 furnished without polished ends and enamel paint.

Item No.	Cutting Edge	Stock Size	Length
24151	5/64"	1/4"	3-1/2"
24152	1/8"	5/16"	4-1/4"
24153	5/32"	3/8"	5"
24154	1/4"	1/2"	6"
24155	3/8"	5/8"	6-1/4"

Prick Punches

No. 310

Made from high quality, carbon alloy tool steel. These punches are used for marking by small indentation along drawn or scribed lines in layout work. Also for piercing holes in light gauge metal and other materials.

Item No.	Stock Size	Length
24801	1/4"	3"
24802	3/8"	5"
24803	1/2"	6"



Punches

Solid or Starting Punches

No. 330

Made from high quality, carbon alloy tool steel. These punches are used to loosen such things as frozen pins and keys.

Item No.	Point Size	Stock Size	Length	Taper
24001	1/16"	3/8"	5"	1-3/4"
24002	1/8"	3/8"	5"	1-3/4"
24003	5/32"	3/8"	5"	2-1/4"
24004	3/16"	3/8"	5"	2-1/4"
24005	1/4"	3/8"	5"	2-1/8"
24006	5/16"	1/2"	6"	2"
24007	3/8"	5/8"	6-1/2"	2-1/4"
24008	1/2"	5/8"	7"	2-1/2"

Solid or Starting Punches, Economy Grade

No. 331

Our No. 330 furnished without polished ends and enamel paint.

Item No.	Point Size	Stock Size	Length	Taper
24051	3/32"	3/8"	5"	1-3/4"
24052	1/8"	3/8"	5"	1-3/4"
24053	5/32"	3/8"	5"	2-1/4"
24054	3/16"	3/8"	5"	2-1/4"
24055	1/4"	3/8"	5"	2-1/8"
24056	5/16"	1/2"	6"	2"

Lining Up/Drift Punches

No. 340

Made from high quality, carbon alloy tool steel. These punches are used for aligning and sizing holes in light gauge metal and other materials.

Item No.	Point Size	Stock Size	Length	Taper
24351	1/8"	5/16"	8"	3-1/2"
24352	5/32"	3/8"	9"	4-1/4"
24353	3/16"	1/2"	10"	6-1/2"
24354	1/4"	5/8"	12"	7-1/2"
24355	5/16"	3/4"	12"	7-1/2"
24356	3/8"	3/4"	15"	8"
24357	1/2"	7/8"	18"	9-1/2"

Punches

Pin Punches

Pin Punches,
Economy Grade

Extra Long Pin Punches

Pin Punches

No. 350

Made from high quality, carbon alloy tool steel. These punches are used for driving and removing such things as pins and keys after initial movement by a starting punch.

Item No.	Point Size	Stock Size	Length	Pin Length
24501	1/16"	1/4"	4"	3/4"
24502	3/32"	5/16"	4-1/2"	1"
24503	1/8"	5/16"	4-3/4"	1"
24504	5/32"	5/16"	5"	1"
24505	3/16"	3/8"	5-1/4"	1-1/8"
24506	7/32"	3/8"	5-1/2"	1-1/4"
24507	1/4"	3/8"	5-3/4"	1-1/4"
24508	5/16"	7/16"	6"	1-3/8"
24509	3/8"	1/2"	6-1/2"	1-1/2"

Pin Punches, Economy Grade

No. 351

Our No. 350 furnished without polished ends and enamel paint.

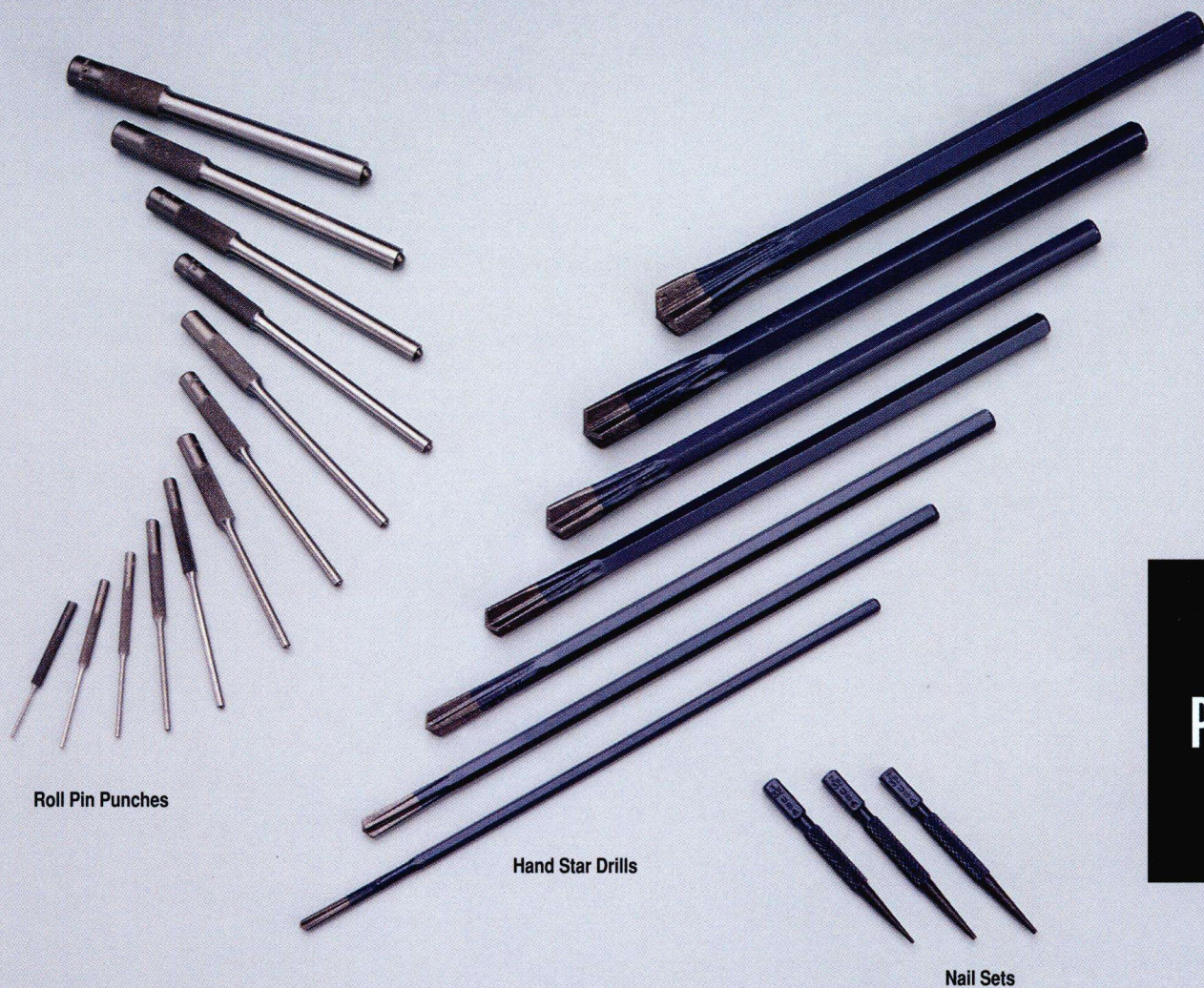
Item No.	Point Size	Stock Size	Length	Pin Length
24551	1/16"	1/4"	4"	3/4"
24552	3/32"	5/16"	4-1/2"	1"
24553	1/8"	5/16"	4-3/4"	1"
24554	5/32"	5/16"	5"	1"
24555	3/16"	3/8"	5-1/4"	1-1/8"
24557	1/4"	3/8"	5-3/4"	1-1/4"
24558	5/16"	7/16"	6"	1-3/8"

Extra Long Pin Punches

No. 360

Use is the same as our No. 350 where extra length is needed.

Item No.	Point Size	Stock Size	Length	Pin Length
24701	1/8"	5/16"	8"	3-1/2"
24702	3/16"	3/8"	8"	3-1/2"
24703	1/4"	3/8"	8"	3-1/2"
24704	5/16"	7/16"	8"	3-1/2"
24705	3/8"	1/2"	8"	3-1/2"



Punches

Roll Pin Punches

Hand Star Drills

Nail Sets

Roll Pin Punches

No. 370 (Pat No. 3,099,876)

For simplifying the removal of spring or roll pins. Each Hargrave Roll Pin Punch has a pilot point that fits into the hollow center of the pin, holding the driving shoulder of the punch in perfect contact position. Spring or roll pins are quickly and easily removed without scoring the wall of hole or damaging pins. Hargrave Roll Pin Punches are manufactured to $\pm .000/- .010$ tolerance. Twelve sizes match standard pin diameters and maximum lengths.

Item No.	Point Size	Stock Size	Length	Pin Length
25101	1/16"	1	2-3/4"	1"
25102	5/64"	2	3-1/4"	1-1/2"
25103	3/32"	3	3-1/2"	1-1/2"
25104	1/8"	4	4"	2"
25105	5/32"	5	4-1/2"	2-1/2"
25106	3/16"	6	4-1/2"	2-1/2"
25107	7/32"	7	5"	3"
25108	1/4"	8	5-1/2"	3-1/2"
25109	5/16"	9	6"	4"
25110	3/8"	10	6"	4"
25111	7/16"	11	6"	4"
25112	1/2"	12	6"	4"

Hand Star Drills

No. 400

Made from special analysis alloy steel. Properly designed and tempered to insure long, satisfactory service. Used for making holes in masonry walls such as cinder or cement block.

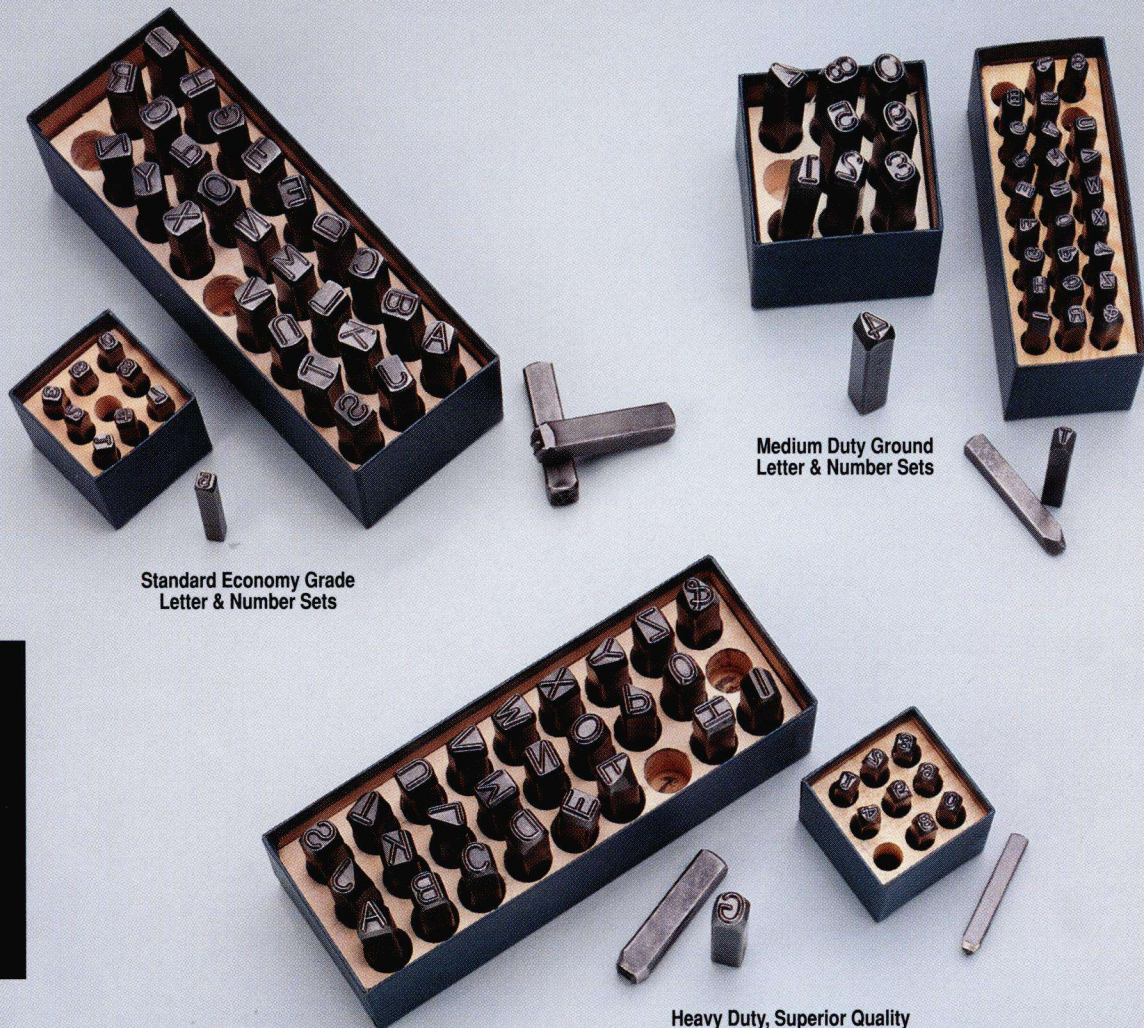
Item No.	Cuts	Hex Stock Size	Overall Length
26501	1/4"	1/4"	12"
26503	3/8"	5/16"	12"
26504	1/2"	3/8"	12"
26505	5/8"	7/16"	12"
26506	3/4"	1/2"	12"
26507	7/8"	5/8"	12"
26508	1"	5/8"	12"

Nail Sets

No. 440

Item No.	Point Size	Stock Size	Overall Length
28300	1/32"	11/32"	4"
28301	1/16"	11/32"	4"
28302	3/32"	11/32"	4"

Number & Letter Stamps



Standard Economy Grade
Letter & Number Sets

Medium Duty Ground
Letter & Number Sets

Heavy Duty, Superior Quality
Letter & Number Sets

Standard Economy Grade Letter & Number Sets

No. 410

A well made, low cost stamp crafted from alloy tool steel. Designed for lighter applications. Ideal for practical and economical service.

Item No.	Character Size	Stock Size	Length
27 Piece Letter Set			
28000	1/16"	1/4"	2-3/8"
28001	3/32"	1/4"	2-3/8"
28002	1/8"	1/4"	2-3/8"
28003	3/16"	5/16"	2-7/16"
28004	1/4"	3/8"	2-9/16"
28005	3/8"	1/2"	2-7/8"
28006	1/2"	5/8"	2-7/8"
9 Piece Number Set			
28050	1/16"	1/4"	2-3/8"
28051	3/32"	1/4"	2-3/8"
28052	1/8"	1/4"	2-3/8"
28053	3/16"	5/16"	2-7/16"
28054	1/4"	3/8"	2-9/16"
28055	3/8"	1/2"	2-7/8"
28056	1/2"	5/8"	2-7/8"

Medium Duty Ground Letter & Number Sets

No. 420

A good quality stamp, carefully machined, heat treated and hand finish ground to produce a stamp to satisfy the particular craftsman.

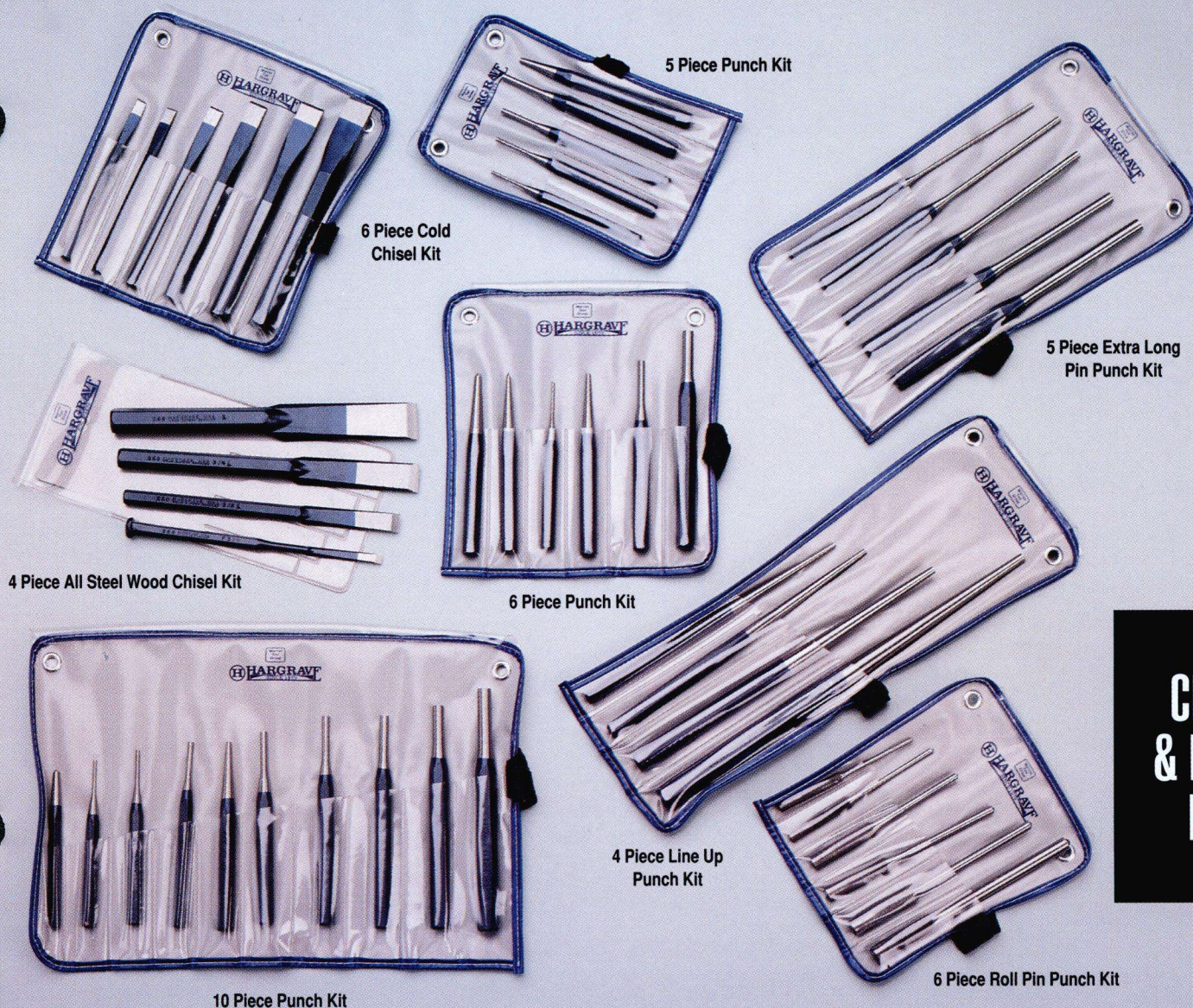
Item No.	Character Size	Stock Size	Length
27 Piece Letter Set			
28100	1/16"	1/4"	2-3/8"
28101	3/32"	1/4"	2-3/8"
28102	1/8"	1/4"	2-3/8"
28103	5/32"	5/16"	2-7/16"
28104	3/16"	5/16"	2-7/16"
28105	1/4"	3/8"	2-9/16"
28106	5/16"	7/16"	2-3/4"
28107	3/8"	1/2"	2-7/8"
28108	1/2"	5/8"	2-7/8"
9 Piece Number Set			
28150	1/16"	1/4"	2-3/8"
28151	3/32"	1/4"	2-3/8"
28152	1/8"	1/4"	2-3/8"
28153	5/32"	5/16"	2-7/16"
28154	3/16"	5/16"	2-7/16"
28155	1/4"	3/8"	2-9/16"
28156	5/16"	7/16"	2-3/4"
28157	3/8"	1/2"	2-7/8"
28158	1/2"	5/8"	2-7/8"

Heavy Duty, Superior Quality Letter & Number Sets

No. 430

Our top quality line. Heavy stock, precise workmanship and special finish grinding combine to produce a superior stamp.

Item No.	Character Size	Stock Size	Length
27 Piece Letter Set			
28201	1/32"	1/4"	2-5/8"
28202	1/16"	5/16"	2-5/8"
28203	3/32"	5/16"	2-5/8"
28204	1/8"	5/16"	2-5/8"
28205	5/32"	3/8"	2-3/4"
28206	3/16"	3/8"	2-3/4"
28207	1/4"	7/16"	2-7/8"
28208	5/16"	1/2"	2-7/8"
28209	3/8"	5/8"	3-5/16"
28210	1/2"	5/8"	3-5/16"
9 Piece Number Set			
28251	1/32"	1/4"	2-5/8"
28252	1/16"	5/16"	2-5/8"
28253	3/32"	5/16"	2-5/8"
28254	1/8"	5/16"	2-5/8"
28255	5/32"	3/8"	2-3/4"
28256	3/16"	3/8"	2-3/4"
28257	1/4"	7/16"	2-7/8"
28258	5/16"	1/2"	2-7/8"
28259	3/8"	5/8"	3-5/16"
28260	1/2"	5/8"	3-5/16"



Chisel & Punch Kits

Kits

Hargrave kits are packaged in durable, plastic, roll up pouches with strong tape ties; feature grommets so they may be easily hung in the store or at the work-place. The strong, plastic pouches keep tools protected from damaging moisture, spills, and dirt while keeping tools easily accessible. Displays are attractively designed to assure high turnover in a retail setting.

6 Piece Cold Chisel Kit

No. 27500

Cold Chisels:	22501 - 1/4"	22504 - 1/2"
	22502 - 5/16"	22505 - 5/8"
	22503 - 3/8"	22506 - 3/4"

Shipping Wt. 1-3/4 Lbs.

4 Piece All Steel Wood Chisel Kit

No. 27505

All Steel		
Wood Chisels:	23000 - 1/4"	23002 - 3/4"
	23001 - 1/2"	23003 - 1"

Shipping Wt. 2 Lbs.

5 Piece Punch Kit

No. 27510

Pin Punches:	24502 - 3/32"	24504 - 5/32"
	24503 - 1/8"	24505 - 3/16"

Solid Punch: 24003 - 5/32"

Shipping Wt. 1 Lb.

6 Piece Punch Kit

No. 27512

Center Punch:	24103 - 5/32"	
Pin Punches:	24505 - 3/16"	24508 - 5/16"
Prick Punch:	24802 - 3/8"	
Solid Punches:	24002 - 1/8"	24502 - 1/4"

Shipping Wt. 1-1/2 Lbs.

10 Piece Punch Kit

No. 27514

Center Punch:	24102 - 1/8"	
Pin Punches:	24502 - 3/32"	24506 - 7/32"
	24503 - 1/8"	24507 - 1/4"
	24504 - 5/32"	24508 - 5/16"
	24505 - 3/16"	24509 - 3/8"

Solid Punch: 24002 - 1/8"

Shipping Wt. 2-3/4 Lbs.

5 Piece Extra Long Pin Punch Kit

No. 27516

Extra Long		
Pin Punches:	24701 - 1/8"	24704 - 5/16"
	24702 - 3/16"	24705 - 3/8"
	24703 - 1/4"	

Shipping Wt. 1-3/4 Lbs.

4 Piece Line Up Punch Kit

No. 27518

Line Up		
Punches:	24351 - 1/8"	24353 - 3/16"
	24352 - 5/32"	24354 - 1/4"

Shipping Wt. 2 Lbs.

6 Piece Roll Pin Punch Kit

No. 27520

Roll Pin		
Punches:	25104 - 1/8"	25107 - 7/32"
	25105 - 5/32"	25108 - 1/4"
	25106 - 3/16"	25109 - 5/16"

Shipping Wt. 3/4 Lb.

Chisel & Punch Kits

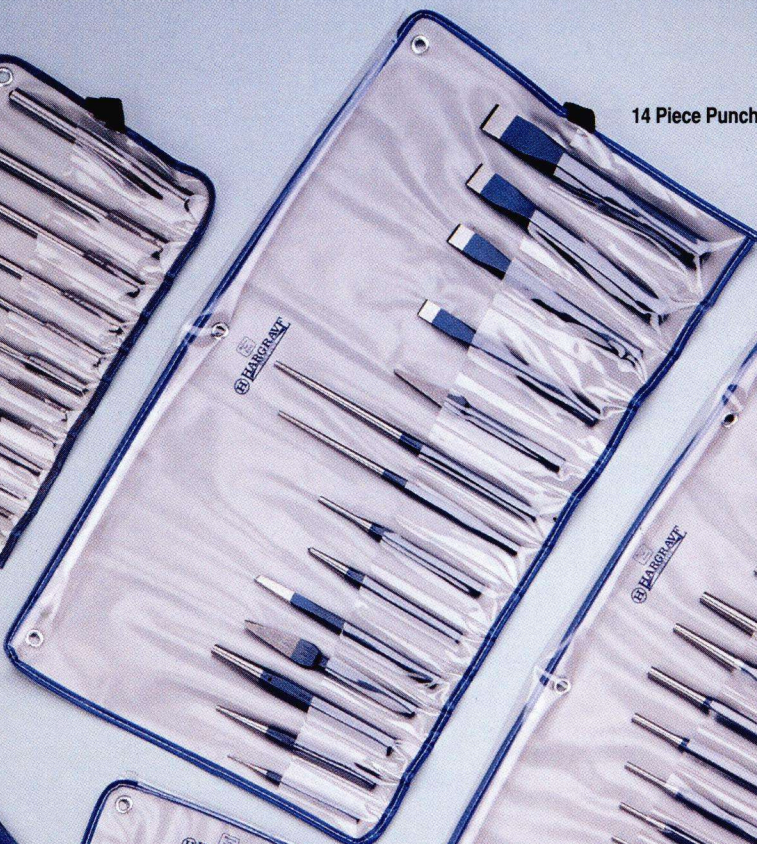
12 Piece
Roll Pin Punch Kit



4 Piece
Punch &
Chisel Kit



6 Piece Punch & Chisel Kit



24 Piece Punch & Chisel Kit

14 Piece Punch & Chisel Kit



Rivet
Repair Kit

Nail Set Kit

12 Piece Roll Pin Punch Kit No. 27522

Roll Pin		
Punches:	25101 - 1/16"	25107 - 7/32"
	25102 - 5/64"	25108 - 1/4"
	25103 - 3/32"	25109 - 5/16"
	25104 - 1/8"	25110 - 3/8"
	25105 - 5/32"	25111 - 7/16"
	25106 - 3/16"	25112 - 1/2"

Shipping Wt. 1-3/4 Lbs.

4 Piece Punch & Chisel Kit No. 27530

Cold Chisel:	22505 - 5/8"	
Center Punch:	24103 - 5/32"	
Pin Punch:	24504 - 5/32"	
Solid Punch:	24004 - 3/16"	Shipping Wt. 3/4 Lb.

Nail Set Kit No. 27540

Nail Set:	28300 - 1/32"	
Nail Set:	28301 - 1/16"	
Nail Set:	28302 - 3/32"	Shipping Wt. 1/2 Lb.

6 Piece Punch & Chisel Kit No. 27532

Cold Chisels:	22504 - 1/2"	22506 - 3/4"
Center Punch:	24104 - 1/4"	
Pin Punches:	24503 - 1/8"	24508 - 5/16"
Solid Punch:	24004 - 3/16"	

Shipping Wt. 2 Lbs.

14 Piece Punch & Chisel Kit No. 27534

Chisels		Punches
Cape:	22703 - 1/4"	Center: 24103 - 5/32"
Cold:	22504 - 1/2"	Line Up: 24351 - 1/8"
	22505 - 5/8"	24352 - 5/32"
	22506 - 3/4"	Pin: 24505 - 3/16"
	22507 - 7/8"	24501 - 1/16"
		Solid: 24006 - 5/16"
		24002 - 1/8"

Diamond	
Point:	22903 - 1/4"
Half Round	
Nose:	22803 - 1/4"

Shipping Wt. 5-1/2 Lbs.

24 Piece Punch & Chisel Kit No. 27536

Chisels		Punches
Cape:	22703 - 1/4"	Center: 24103 - 5/32"
Cold:	22501 - 1/4"	24104 - 1/4"
	22502 - 5/16"	Pin: 24502 - 3/32"
	22503 - 3/8"	24503 - 1/8"
	22504 - 1/2"	24504 - 5/32"
	22505 - 5/8"	24505 - 3/16"
	22506 - 3/4"	24507 - 1/4"
	22507 - 7/8"	24508 - 5/16"

Diamond		Solid:
Point:	22903 - 1/4"	24001 - 1/16"
Half Round		24002 - 1/8"
Nose:	22803 - 3/16"	24003 - 5/32"
		24004 - 3/16"
		24005 - 1/4"
		24006 - 5/16"

Shipping Wt. 7 Lbs.

Rivet Repair Kit No. 27538

Rivet Buster:	22622
Pin Punch:	24505 - 3/16"
Rivet Set:	24832

Shipping Wt. 1-1/4 Lbs.



Pegboard Chisel & Punch Display

Countertop Display

Chisel & Punch Displays

Pegboard Chisel & Punch Display

No. 27550

2 each:

Chisels		Punches	
Cape:	22703 - 1/4"	Prick:	24801 - 1/4"
Cold:	22501 - 1/4"	Center:	24102 - 5/16"
	22503 - 3/8"		24103 - 3/8"
	22504 - 1/2"		24104 - 1/2"
	22505 - 5/8"	Line Up:	24351 - 1/8"
	22506 - 3/4"		24352 - 5/32"
	22507 - 7/8"		24353 - 3/16"
	22508 - 1"		24354 - 1/4"
Extra Long		Solid:	24002 - 3/8"
Cold:	22602 - 1/2"		24004 - 3/16"
	22604 - 3/4"	Pin:	24502 - 3/32"
Round			24503 - 1/8"
Nose:	22803 - 1/4"		24504 - 5/32"
			24505 - 3/16"
Rivet			24507 - 1/4"
Buster:	22622		24508 - 5/16"
		Extra Long	
		Pin:	24702 - 3/16"
			24703 - 1/4"

1 each:

6 Pc. Cold Chisel Kit	27500
6 Pc. Punch & Chisel Kit	27532
14 Pc. Punch & Chisel Kit	27534
5 Pc. Punch Kit	27510
6 Pc. Punch Kit	27512
4 Pc. Line Up Punch Kit	27518
Shipping Wt. 53 Lbs.	

Countertop Display

No. 27552

6 each:

Chisels		Punches	
Cold:	22504 - 1/2"	Center:	24103 - 3/8"
	22505 - 5/8"		24104 - 1/2"
	22506 - 3/4"	Pin:	24502 - 3/32"
			24503 - 1/8"
			24505 - 3/16"
			24507 - 1/4"
		Solid:	24004 - 3/16"
Shipping Wt. 15 Lbs.			

Bars

Carpenter's
Wrecking Bars

High Quality
Wrecking Bars

Wedge Point
Crowbars

Double Claw Carpenter's
Wrecking Bars

Pinch Point
Crowbars

Tamper Top
Post Hole Digger

Hexagon Telegraph
Digging Bars

Wedge Point Crowbars

No. 40

Used to pry and move heavy objects. High carbon steel. Smooth taper, roll forged.

Item No.	Stock	Length	Weight (Lbs.)
02001	1"	48"	10
02002	1-1/8"	51"	12
02005	1-1/4"	60"	18
02006	1-3/8"	64"	22
02007	1-1/2"	66"	26

Pinch Point Crowbars

No. 41

Used to pry and move heavy objects. High carbon steel. Smooth taper, roll forged.

Item No.	Stock	Length	Weight (Lbs.)
02101	7/8"	36"	6
02102	1"	48"	10
02103	1-1/8"	51"	12
02106	1-1/4"	60"	18
02107	1-3/8"	64"	22
02108	1-1/2"	66"	26

Carpenter's Wrecking Bars

No. 45

High carbon hex steel.

Item No.	Stock	Length	Weight (Lbs.)
02801	1/2"	12"	3/4
02802	5/8"	18"	2
02803	3/4"	24"	3-1/2
02804	3/4"	30"	4
02805	3/4"	36"	5
02806	7/8"	36"	7
02807	1"	48"	13

High Quality Wrecking Bars

No. 45 H.Q.

High carbon hex steel. Heat treated. Both chisel and claw ends polished.

Item No.	Stock	Length	Weight (Lbs.)
02902	3/4"	24"	3-1/2
02903	3/4"	30"	4-1/2
02904	3/4"	36"	5-1/2
02905	7/8"	36"	7

Double Claw Carpenter's Wrecking Bars

No. 46

High carbon hex steel. Heat treated.

Item No.	Stock	Length	Weight (Lbs.)
02714	3/4"	24"	3-1/2
02715	3/4"	30"	4-1/4

Tamper Top Post Hole Digger

No. 49

Used for digging post holes and tamping earth. One piece, high carbon steel.

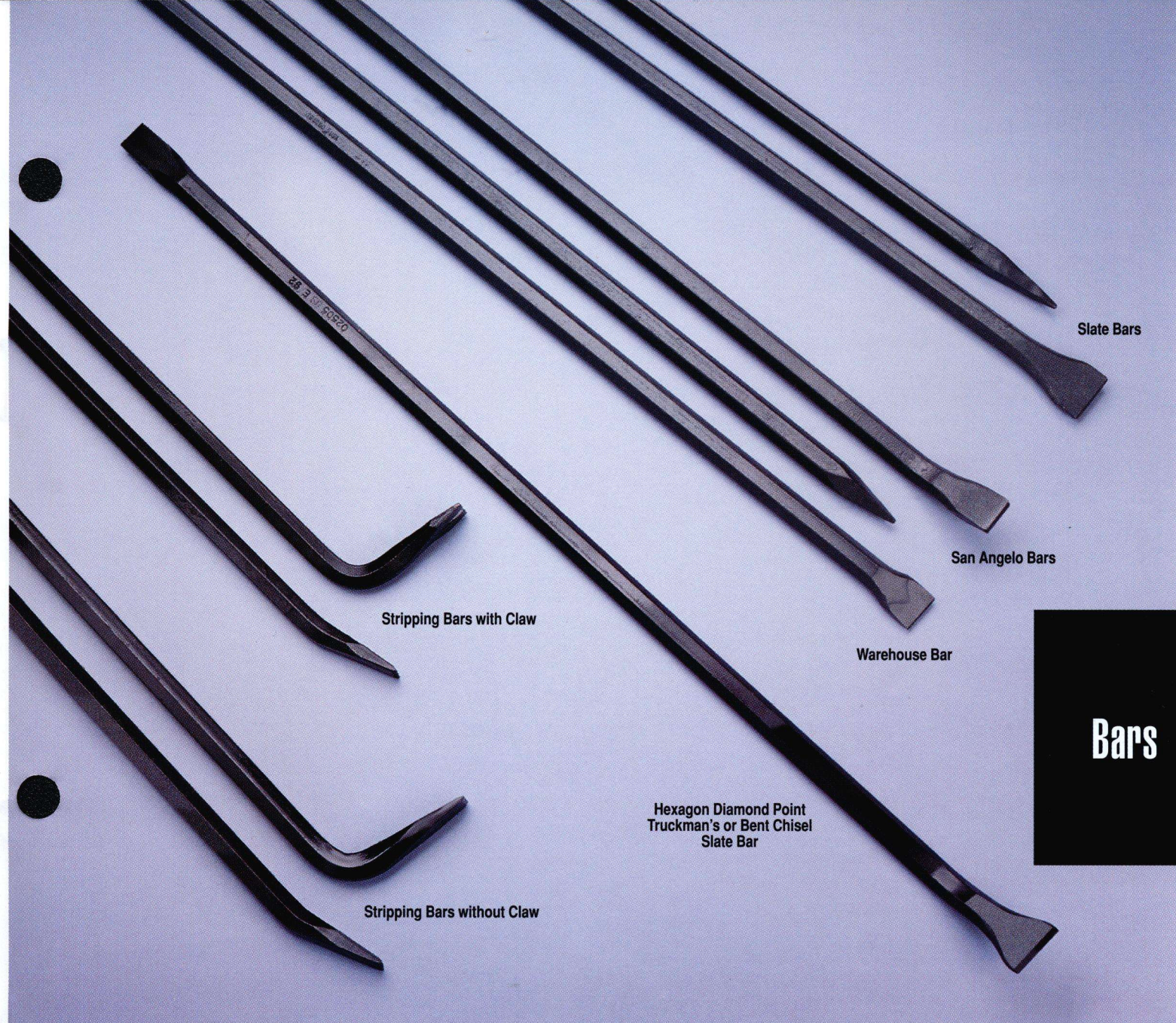
Item No.	Stock	Length	Weight (Lbs.)
02701	1"	69"	17

Hexagon Telegraph Digging Bars

No. 49T

Used for digging holes for insertion of posts, and to line up long posts once they are in and being tamped into place.

Item No.	Stock	Length	Weight (Lbs.)
02716	1"	72"	17
02717	1"	96"	28



Slate Bars

San Angelo Bars

Warehouse Bar

Hexagon Diamond Point
Truckman's or Bent Chisel
Slate Bar

Stripping Bars with Claw

Stripping Bars without Claw

Bars

Stripping Bars with Claw

No. 450

Used to strip concrete forms after the concrete has set. High carbon hex steel.

Item No.	Stock	Length	Weight (Lbs.)
02501	7/8"	42"	8
02502	1"	48"	12

Stripping Bars without Claw

No. 451

Used to strip concrete forms after the concrete has set. High carbon hex steel.

Item No.	Stock	Length	Weight (Lbs.)
02503	7/8"	42"	8
02504	1"	48"	12

Slate Bars

No. 453

Used by road crews and railroad gangs for lifting or breaking rocks. High carbon hex steel.

Item No.	Stock	Length	Chisel Width	Weight (Lbs.)
02602	1"	48"	1-1/8"	11
02603	1"	54"	1-1/8"	12
02604	1"	60"	1-1/8"	14

Hexagon Diamond Point Truckman's or Bent Chisel Slate Bar

No. 453B

Used to move material on pallets and to adjust loads, or for lifting or breaking rocks. High carbon steel.

Item No.	Stock	Length	Chisel Width	Weight (Lbs.)
02605	1"	60"	2"	14

Warehouse Bar

No. 454

Used for opening crates or for removing nails on pallets and skids that are nailed down on trucks and railroad cars.

Item No.	Stock	Length	Weight (Lbs.)
02505	1"	48"	11

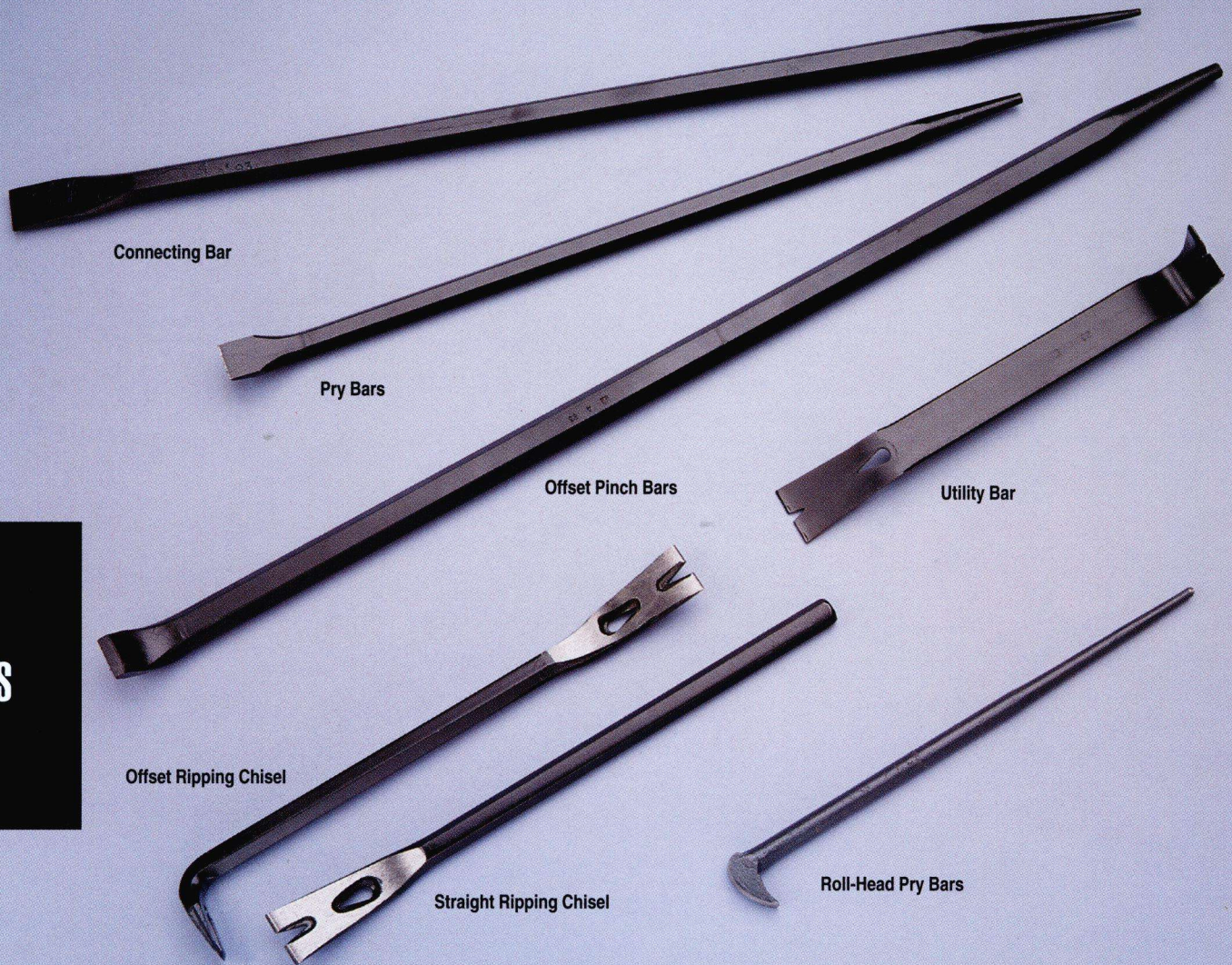
San Angelo Bars

No. 455

Used for digging in soft soils. High carbon hex steel.

Item No.	Stock	Length	Chisel Width	Weight (Lbs.)
02606	1"	60"	1-3/4"	11
02609	1"	72"	1-3/4"	15
02610	1"	84"	1-3/4"	20

Bars



Connecting Bar

No. 457

Used to line up bolt holes in the erection of steel. High carbon steel.

Item No.	Stock	Length	Weight (Lbs.)
02706	7/8"	30"	5

Pry Bars

No. 458

Used to line up holes and for prying work, such as tightening generators in auto repair work, etc. Made from tapered high carbon, hexagonal steel. Hot forged and heat treated. Tapered end makes it ideal for use in hole alignment.

Item No.	Stock	Length	Weight (Lbs.)
02707	1/2"	13"	3/4
02708	5/8"	18"	1-1/2
02709	3/4"	24"	2-1/2

Offset Pinch Bars

No. 459

High carbon steel. Meets GSA specifications.

Item No.	Stock	Length	Weight (Lbs.)
02710	3/4"	26"	3-1/2
02711	7/8"	30"	6
02712	1"	36"	8-1/4

Utility Bar

No. 460

Item No.	Stock	Length	Weight (Lbs.)
02713	1/4" x 1-3/8"	14"	1-1/2

Offset Ripping Chisel

No. 461

Heat treated.

Item No.	Stock	Length	Weight (Lbs.)
02718	3/4"	17"	2

Straight Ripping Chisel

No. 462

Heat treated.

Item No.	Stock	Length	Weight (Lbs.)
02719	3/4"	18"	2

Roll-Head Pry Bars

No. 464

Forged from top quality steel and heat treated to resist breaking or bending.

Item No.	Stock	Length	Weight per box (Lbs.)
04216	5/8"	16"	1-1/2
04218	3/4"	18"	2-1/2



Earth Tools

Clay Picks

No. 5

High carbon steel. Heat treated. Chisel and Point. Slip on type handle required.

Item No.	Eye No.	Tool Length	Weight (Lbs.)
00101	6	21"	5
00102	6	23"	6
00103	6	25"	7
00104	6	26"	8

Double Point Pick

No. 5E

High carbon steel. Perfect anchor curve. Slip on type handle required.

Item No.	Eye No.	Tool Length	Weight (Lbs.)
00106	6	25"	7

Coal Pick

No. 18

High carbon steel. Fitted handle.

Item No.	Eye No.	Tool Length	Handle Length	Weight (Lbs.)
00210	10	17"	36"	3

Pick Mattock

No. 20

High carbon steel. Heat treated. Polished bevel. Slip on type handle required.

Item No.	Eye No.	Tool Length	Blade Size	Point Length	Weight (Lbs.)
00301	6	19"	3-1/2" x 8"	8"	5

Cutter Mattock

No. 22

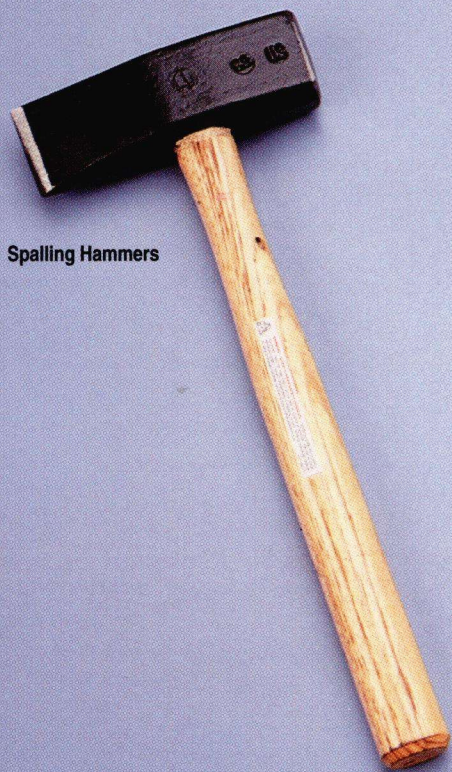
High carbon steel. Heat treated. Self cleaning blade taper. Slip on type handle required.

Item No.	Eye No.	Tool Length	Blade Size	Point Length	Weight (Lbs.)
00307	6	15-3/4"	3-1/2" x 8"	2-1/2" x 4-3/4"	5

Tampers

No. 47

Item No.	Head Size	Handle Length	Weight (Lbs.)
02703	8" x 8"	42"	13
02704	10" x 10"	42"	16



Spalling Hammers



New England Pattern
Hand Drilling Hammers

Hammers

Spalling Hammers

Description. These are stone mason's tools.

Proper Uses. Hammers are designed for cutting and shaping stone and concrete.

Abuse/Misuse. NEVER use these tools for striking metal.

No. 71H

High carbon steel. Heat treated. Machine, polished, beveled striking faces. Top grade handle.

Item No.	Eye Size	Tool Length	Face	Handle Length	Head Weight (Lbs.)
00604	3/4" x 1"	6-1/4"	1-1/4" x 1-7/8"	16"	4

New England Pattern Hand Drilling Hammers

Description. These heavy, short handled hammers are made in slightly varying configurations. The double faced head is crowned with beveled striking faces.

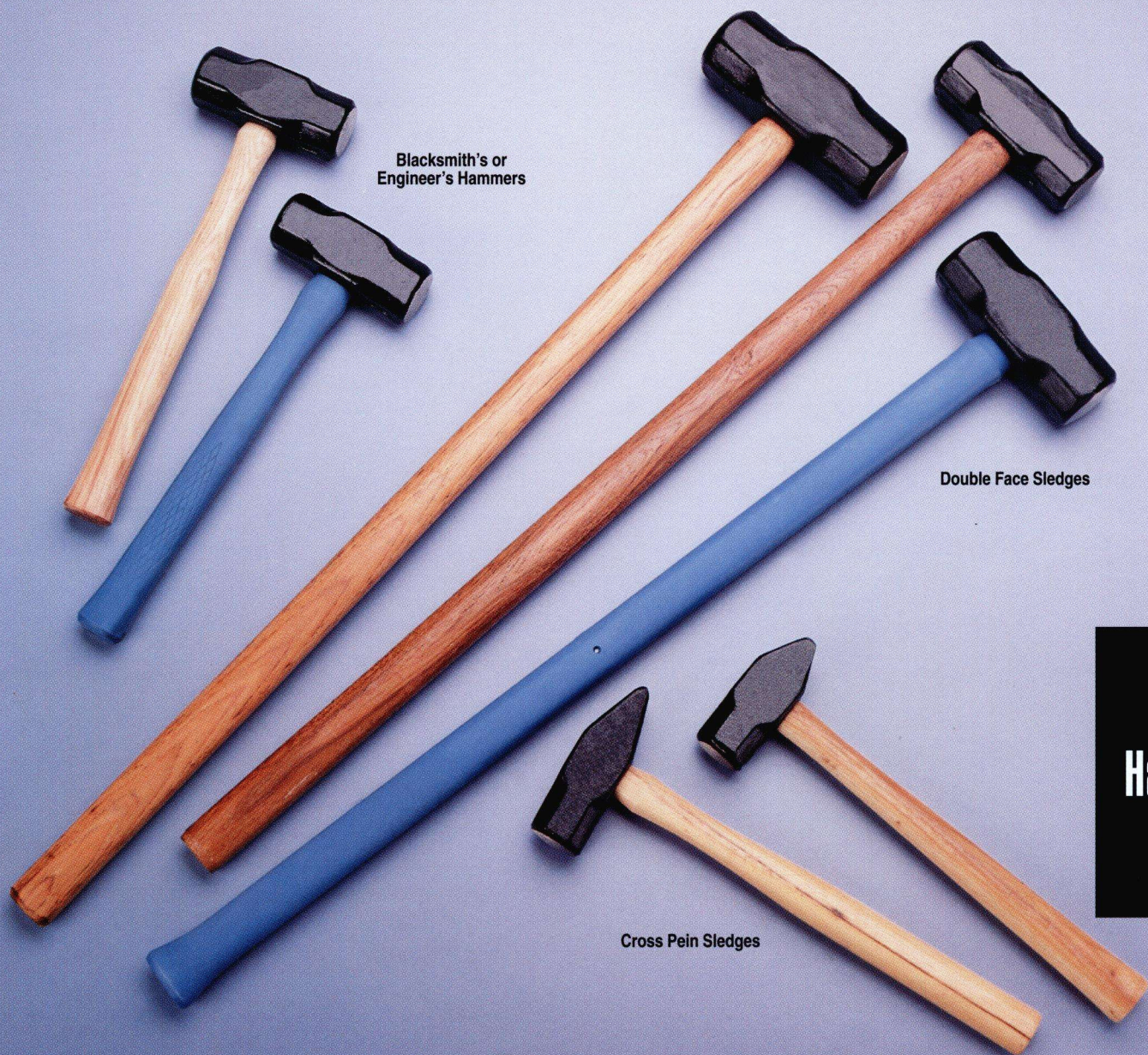
Proper Uses. These hammers are designed for use with chisels, punches, star drills and hardened nails. Their design permits heavy blows with limited swing—especially advantageous in restricted working areas.

Abuse/Misuse. NEVER use these tools for sledging or stone work.

No. 80H

High carbon steel. Heat treated. Machined, polished faces. Top grade handle.

Item No.	Eye Size	Tool Length	Face	Handle Length	Head Weight (Lbs.)
01002	3/4" x 1"	3-1/2"	1-1/4"	10-1/2"	2
01004	3/4" x 1"	4"	1-1/2"	10-1/2"	3
01006	3/4" x 1"	4-1/2"	1-5/8"	10-1/2"	4



Blacksmith's or
Engineer's Hammers

Double Face Sledges

Cross Pein Sledges

Hammers

Double Face Sledges and Blacksmith's or Engineer's Hammers

Description. This is the most commonly used type of sledge hammer and is made in slightly different head configurations. All patterns have crowned striking faces with beveled edges.

Proper Uses. Sledges are designed for general sledging operations in striking wood, metal, concrete or stone. Common uses are drifting heavy timbers and striking spikes, cold chisels, rock drills and hardened nails, and woodsplitting wedges.

Abuse/Misuse. NEVER use a sledge to strike a hammer, sledge, or maul. NEVER use a sledge with a loose or damaged handle.

Double Face Sledges

No. 84HFG

High carbon steel. Heat treated. Machined, polished faces. Fiberglass handle.

Item No.	Eye Size	Tool Length	Face	Handle Length	Head Weight (Lbs.)
91108	3/4" x 1"	5-1/2"	1-1/2"	16"	4
91112	1" x 1-3/8"	5"	2"	36"	6
91114	1" x 1-3/8"	6-1/4"	2"	36"	8
91116	1" x 1-3/8"	6-1/4"	2-1/8"	36"	10

Double Face Sledges and Blacksmith's or Engineer's Hammers

No. 84H

High carbon steel. Heat treated. Machined, polished faces. Top grade handle.

Item No.	Eye Size	Tool Length	Face	Handle Length	Head Weight (Lbs.)
01102	3/4" x 1"	4-3/8"	1-1/4"	16"	2
01104	3/4" x 1"	4-3/8"	1-3/8"	16"	2-1/2
01106	3/4" x 1"	5"	1-1/2"	16"	3
01107	3/4" x 1"	5-1/2"	1-1/2"	—	4
01108	3/4" x 1"	5-1/2"	1-1/2"	16"	4
01110	3/4" x 1"	5-1/2"	1-1/2"	32"	4
01111	1" x 1-3/8"	5"	2"	—	6
01112	1" x 1-3/8"	5"	2"	36"	6
01113	1" x 1-3/8"	6-1/4"	2"	—	8
01114	1" x 1-3/8"	6-1/4"	2"	36"	8
01115	1" x 1-3/8"	6-1/4"	2-1/8"	—	10
01116	1" x 1-3/8"	6-1/4"	2-1/8"	36"	10
01117	1" x 1-3/8"	7-3/8"	2-1/8"	—	12
01118	1" x 1-3/8"	7-3/8"	2-1/8"	36"	12
01120	1" x 1-3/8"	8-1/8"	2-3/8"	36"	16
01122	1-1/4" x 1-1/2"	9-5/8"	2-3/8"	36"	20

Cross Pein Sledges

Description. These heavy duty hammers are designed for a blacksmith's use in striking metal. Striking face is crowned with beveled edge.

Proper Uses. The striking face is designed for general blacksmith work in striking unhardened metal. The peins are used for shaping (fullering) and bending unhardened metal.

Abuse/Misuse. NEVER use a sledge to strike a hammer, sledge, or maul.

No. 85H

High carbon steel. Heat treated. Machined, polished faces. Top grade handle.

Item No.	Eye Size	Tool Length	Face	Handle Length	Head Weight (Lbs.)
01302	3/4" x 1"	4-1/2"	1-3/8"	16"	2
01306	3/4" x 1"	5"	1-5/8"	16"	3
01308	1" x 1-3/8"	7"	2-1/4"	36"	8

Wood- splitting Tools



Axes

High quality design and superior engineering make Warren axes the hard working leaders.

Item	Length	Head Weight (Lbs.)
Michigan Single Bit No. 114		
01910	32"/36"	3-1/2
Michigan Double Bit No. 115		
01920	36"	3-1/2
Boys' No. 116		
01930	28"	2-1/4

Woodsplitting Mauls

Description. Woodchopper's mauls have a round, bevel-edged striking face with a splitting edge opposite.

Proper Uses. These tools are designed for splitting wood. Also, they are used in conjunction with woodsplitting wedges by first making a notch with the splitting edge and then driving the wedge with the maul's striking face.

Abuse/Misuse. NEVER use this tool to strike concrete. NEVER drive one maul by striking with another maul, sledge or other striking tool.

Sledge Eye

No. 112H

High carbon steel. Heat treated. Machined, polished faces. Top grade handle.

Item	Eye	Tool	Face	Bit	Handle	Head Weight (Lbs.)
01802	1"x1-3/8"	8-1/2"	1-7/8"	3-1/2"	32"/36"	6
01804	1"x1-3/8"	9-1/8"	2-1/8"	4"	32"/36"	8

Axe Eye

No. 113H

High carbon steel. Heat treated. Machined, polished faces. Top grade handle.

Item	Eye	Tool	Face	Bit	Handle	Head Weight (Lbs.)
01902	7/8"x2-1/2"	8-1/2"	1-7/8"	3-1/2"	32"/36"	6
01904	7/8"x2-1/2"	9-1/8"	2-1/8"	4"	32"/36"	8

Square Head Wedges



Sledge Eye

Woodsplitting Wedges

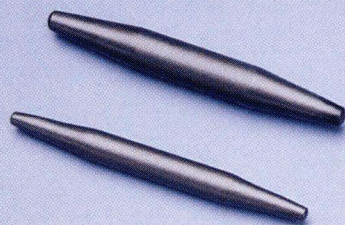
Proper Uses. Woodsplitting wedges are designed for splitting logs, firewood, staves and other wood products. Always use a woodchopper's maul or an axe to make a starting notch. Wedges should be struck with a sledge or woodchopper's maul having a larger striking face than the struck face of the wedge.

Square Head Wedges

No. 120

High carbon steel.

Item No.	Approx. Length	Approx. Head	Bit	Weight (Lbs.)
03601	8"	1-1/2"	1-3/4"	3
03602	9"	1-5/8"	1-7/8"	4
03603	9-1/2"	1-3/4"	2"	5
03604	10"	1-7/8"	2-1/8"	6



Barrel Type Drift Pins



Backing Out Carbon Punches



Double Face Blacksmith's Sledges

Construction
Tools

Barrel Type Drift Pins

No. 176

High carbon steel.

Item	Stock	Length	Weight (Oz.)
05901	9/16"	6"	5
05902	11/16"	7-1/2"	9
05903	13/16"	8"	12
05904	15/16"	8"	18
05905	1-1/16"	8"	25

Backing Out Carbon Punches

No. 179H

High carbon steel.

Item	Eye	Tool	Punch	Handle	Head Weight (Lbs.)
05702	3/4" x 1"	7-1/2"	1/2"	16"	2
05704	3/4" x 1"	7-3/4"	5/8"	16"	2-1/4
05706	3/4" x 1"	8"	3/4"	16"	2-1/2
05708	3/4" x 1"	8-1/4"	7/8"	16"	3
05710	3/4" x 1"	8-1/2"	1"	16"	3-1/4

Double Face Blacksmith's Sledges

No. 84BXH Alloy - Grade B

Item	Eye	Tool	Face	Handle	Head Weight (Lbs.)
92208	3/4" x 1"	5-1/4"	1-3/4"	16"	4
92212	1" x 1-3/8"	6"	2-1/8"	36"	6
92214	1" x 1-3/8"	6-1/2"	2-1/4"	36"	8
92216	1" x 1-3/8"	7"	2-1/2"	36"	10
92218	1" x 1-3/8"	7-1/2"	2-5/8"	36"	12
92220	1" x 1-3/8"	8-1/4"	2-7/8"	36"	16

We can provide you with a large selection of clamps. The Hargrave® line extends from the simple Spring Clamp with 18 lbs. pressure to the #40 Forged Steel Superclamp® that will handle a 40,000 lb. test load. With the Hargrave line you'll be able to offer customers just the right clamp for the job.

Safety Rules, Requirements and Limitations of C-Clamps and Clamping Tools

1. Always wear safety goggles to protect your eyes.
2. Always select the clamp to match the job by ascertaining the following:
 - What is the required opening?
 - What is the required depth?
 - What strength and weight are required?
 - Evaluate the type of clamp to use—bar clamp, C-clamp, spring clamp, etc. Using the right clamp will save time.
3. Remember that C-clamps serve only as temporary devices for holding the work securely in place. Clamps should be removed as soon as the required job has been finished.
4. Use pads with C-clamps to avoid marring the work.
5. Discard any clamp that has a bent frame or a bent screw.
6. Do not use a wrench, pipe, hammer, or pliers to gain extra tightening; a wrench should be used only on those clamps especially designed for tightening with a wrench.
7. Never use a C-clamp for hoisting work. Special lifting clamps are made for this purpose.
8. Avoid using extra large clamps just for the sake of their large throats; instead use deep throated clamps.
9. Never use a C-clamp for hoisting or for supporting a scaffold or platform that may be used to carry people.
10. Do not use C-clamps for securing a load that may be carried over a public highway; vibration may cause the clamps to loosen and the load to break loose.
11. Keep all moving parts lightly oiled and clean; however, make sure there is no dirt or oil on any part that will come in contact with the work.
12. Make sure the swivel (tip) at the end of the screw is turning freely before using.
13. Warren Tool Corporation cannot be responsible for injury or damage caused by tools improperly used, or from tools which have been abused or badly worn.

Test Load Comparison Chart

	#40	#100	#43	#400 Body	#4400	#41 #44	#300	#540 Carr.
0"	2,800							
1"	5,600							
1-1/2"	8,950							
2"	12,500	7,500		3,500		2,700	2,700	2-1/2" 1,100
3"	16,250	8,500		3,500		3,000	2,800	1,800
4"	20,000	10,000	10,000	6,500	4,400	3,700	3,200	2,150
5"	23,800							2,250
6"	27,500	11,250	11,250	6,900	5,400	4,500	4,300	2,450
8"	31,250	12,500	12,500	6,900	5,900	5,200	4,500	2,750
10"	35,000	13,750		8,000		6,000	5,000	2,250
12"	40,000	15,000		9,500		8,000	7,500	2,850
14"								2,850

DEEP REACH		
	#48	#573
3-1/2"		1,400
4-1/2"		1,400
6" x 8"	2,200	
6-1/2"		2,000
8" x 12"	1,800	
12" x 16"	1,500	

JUNIOR CLAMPS			
	Super	550	560
#50 1" x 1"	500		
#51 1" x 1-1/2"	500		
#52 1-1/4" x 1-1/4"	800		
#53 1-1/2" x 1-1/2"	850		
#54 2" x 1-1/4"	875		
#55 3" x 1-3/8"	1,100		
#56 2-1/2" x 2-1/2"	850		
1-1/4"			450
2-1/2"		700	550
4"		1,150	
6"		650	

The Hargrave® line of chisels and punches covers a broad range of styles and sizes, so that you can satisfy all of your customers' needs from a single source. Kits and displays are included to provide convenience for your customers and the opportunity for extra sales at your walk in counter.

Safety Rules, Requirements, and Limitations of Chisels and Punches

1. Safety goggles or equivalent eye protection conforming to ANSI requirements must be worn by the user and all persons in the immediate area where any chisel or punch is being used to avoid possible eye injury from flying objects. It is suggested that a safety screen also be used to prevent injury to other workmen from flying particles.
2. Metal cutting chisels are special purpose tools designed and intended only for the cutting, shaping and removing of metal softer than the cutting edge of the chisel itself. Such soft materials may include cast iron, wrought iron, steel, bronze, copper, etc. An initial light cautious blow may be used to ascertain the relative hardness of the struck object with subsequent examination of the cutting edge. To avoid possible bodily injury, chisels must not be used to cut objects as hard or harder than the chisel cutting edge.
3. Chisels, prick, pin, center and starter punches must not be used for prying or wedging, and no surface of the chisel or punch must be struck other than the struck face.
4. A hammer blow should always be struck squarely with the hammer face parallel with the struck face of the chisel or punch. Always avoid glancing blows and over and under strikes.
5. The striking face of the appropriate type and size hammer should have a diameter approximately 3/8 inch (9.5 mm) larger than the struck face of the chisel or punch.
6. Chisels and punches must be inspected at regular intervals and their use discontinued at the first sign of excessive wear, chipping or cracking of the point end, cutting edge, or the struck face, or from bending.
7. Never use a chisel or punch with a dull, chipped or deformed cutting edge or point, or one with a mushroomed struck face.
8. Dulling of the cutting edge or point end may occur from tool usage, and it should be resharpened or redressed to the original contour by the use of a whetstone or file. It is understood that industrial users with adequate facilities and properly trained personnel may choose to redress or resharpen these tools by other means without altering the metallurgical characteristics of the tool.
9. At the first indication of mushrooming of the chisel or punch struck face, it must be redressed to original contour by the use of a hand file. It is understood that industrial users with adequate facilities and properly trained personnel may choose to redress or resharpen these tools by other means without altering the metallurgical characteristics of the tool.
10. Except as noted in item 8 or 9, no area, section, or portion of the chisel or punch must be ground, welded, re-heat treated, or otherwise altered from the original condition as furnished by the manufacturer.
11. The point end diameter of the starter punch or pin punch must approximate the size of the work piece.
12. Pin punches must not be used as a starting (solid) punch.
13. Drift or lining punches are special purpose tools intended for aligning and sizing holes and must not be used for driving metal or other hard objects.
14. Warren Tool Corporation cannot be responsible for injury or damage caused by tools improperly used, or from tools which have been abused or badly worn.

Warren Striking and Struck Tools

Warren hammers have been recognized for their quality since 1911. Our broad selection of styles and sizes will satisfy even the most demanding customer.

Safety Rules, Requirements, and Limitations of Heavy Striking and Struck Tools

The striking and struck faces of tools are designed to direct the force of blows toward the center or body of the tool. Blows struck off center are not directed toward the body of the tool where they can be absorbed, but rather travel directly along the sides of the tool where there is insufficient back up material. The net effect is shearing, rather than cushioning, and is dangerous.

Striking and struck tools are made in various types and sizes, with varying degrees of hardness and different configurations for specific purposes. They should be selected for their intended use and used only for that purpose. Proper use of practically all types involves certain basic rules.

1. Always wear safety goggles when using striking or struck tools, or when near someone else who is doing so.
2. A hammer blow should always be struck squarely with the hammer striking face parallel with the surface being struck. Always avoid glancing blows and over and under strikes.
3. The striking face of the hammer should have a diameter approximately 3/8" larger than the struck face of the tool.
4. Never use one hammer to strike another hammer.
5. Never use a striking or struck tool with loose or damaged handle.
6. Discard any striking or struck tool if it shows dents, cracks, chips, mushrooming, or excessive wear.
7. Never redress striking tools. Cutting edges of these tools may be returned to the original shape with a file or whetstone.

Warren Blacksmith's and Construction Tools

Special-purpose tools for construction sites and blacksmith's operations.

Blacksmith's Punches and Chisels

Description. The punch end of the backing out punch is the same diameter from point to body, and has a fitted handle.

Proper Uses. Blacksmith's backing out punches are designed for backing out bolts, rivets and pins.

Abuse/Misuse. NEVER use a punch with a mushroomed struck face or a chipped or deformed point.

When To Replace. Discard any punch if it is bent or shows cracks, chips, mushrooming or excessive wear. If point end is deformed, it may be redressed.

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10610 Freedom Street
P.O. Box 286
Garrettsville, OH 44231
(216) 527-5681
Toll Free: 800 543-3224
Fax: 800 543-3225